REPORT

OF THE

CANAL COMMISSIONERS

TO

HIS EXCELLENCY, SHELBY M. CULLOM,

GOVERNOR OF ILLINOIS.

DECEMBER 1, 1877.

SPRINGFIELD, ILL.:
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REPORT OF THE COMMISSIONERS.

OFFICE OF THE CANAL COMMISSIONERS,
LOCKPORT, ILL., December 1, 1877.

To His Excellency Shelby M. Cullom, Governor :

In accordance with the provisions of section 13 of "An act to revise the law in relation to the Illinois and Michigan Canal, and for the improvement of the Illinois and Little Wabash Rivers," approved March 27, 1874, in force July 1, 1874, the Canal Commissioners beg leave to submit their annual report.

The Commissioners met pursuant to an invitation from your Excellency at Springfield, on May 29th, A. D., 1877, and organized, by the election of J. O. Glover, President; Martin Kingman, Treasurer, and B. F. Shaw, Secretary; at which time a resolution was adopted continuing William Thomas as General Superintendent.

By invitation of the retiring Board of Canal Commissioners, Joseph Utley, H. G. Anderson, and W. N. Brainard, together with Wm. Thomas, General Superintendent of the Canal, D. C. Jenne, Chief Engineer, and William Milne, Chief Clerk, we met them at Chicago, on May 31st following, and proceeded by steamer "Illinois," to examine the canal from Chicago to Lockport, where the books and papers, with the funds then on hand were received by us. At a meeting of the Board on said 31st of May, a resolution was passed continuing Daniel C. Jenne, as Chief Engineer, and William Milne as Chief Clerk. No changes were made in the other employes at this time.

Afterwards we proceeded with General Superintendent William Thomas and Chief Engineer D. C. Jenne, to examine the canal from Lockport to LaSalle. We also examined the lock and dam at Henry, and the works then in course of construction at Copperas Creek. At a formal meeting, at this time, we directed Chief Engineer D. C. Jenne to examine and report to us in detail the condition of the canal. A copy of said report is herewith submitted, and will be found embraced in the Engineer's report in the Appendix. It was found by said report, and also by our own personal examination of the canal, that large expenditures for repairs would be necessary, and that every means should be used to increase the revenue of the canal to defray said needed expenses.

After reviewing the management of the canal, under the rules of the late Board, it was found that some means should be adopted to increase the business. Therefore, at a meeting of the Board held in Chicago June 21st, the toll sheet was revised, greatly reducing the rates on lumber, salt, iron, etc. A copy of the toll sheet, as adopted, will be found in the Appendix marked, "R." The result of this reduction in tolls has been very satisfactory. The amount of lumber

shipped upon the canal the past season has been about five million feet more than was carried last year; a large portion of this being "through shipments," which were undoubtedly induced by the reduction in rates.

Owing to the short crop of 1876, in the districts along the canal and river, the carriage of grain was necessarily small, as compared with years of a more abundant production. We anticipate for the coming year a large increase of shipment of grain.

At a meeting of the Board on July 5th, of present year, a reduction was made of about ten per cent. in the wages of foremen, lock-tenders, inspector and watchmen, making a saving of about $1,400 per year.

On investigation of the collector's offices it was found that the one at LaSalle could be dispensed with, without detriment to the canal interests, and accordingly, at a meeting of the Board, held September 6, 1877, it was discontinued; thereby reducing the expense of operating the canal about $1,000 per annum.

Navigation on the canal has been maintained without interruption since we took charge in the latter part of May, except about 24 hours on the Dresden level, in the month of August, caused by a break under the north end of the mason work of the Kankakee auqueduct.

The canal was opened for navigation from LaSalle to Lockport April 11th, and through to Chicago, April 16th; and closed from LaSalle to Joliet, November 25th, and from Joliet to Chicago, December 1st.

Navigation on the Illinois river at Copperas Creek was suspended for a period of about three weeks, commencing October 1st, in order to complete the dam; but owing to the low stage of water in the river at that time, it was no particular detriment to the boating interest.

The repairs on the dam at Dayton, caused by a break in the spring, were under construction when we assumed control, and have since been completed at a cost of $3,334.85.

On examination of the dam at Channahon, it was found that the entire structure must be re-built, which was done at a cost of $3,207.-24. For a fuller report on the above structures, we refer you to the report of the general superintendent.

The timber for Nettle Creek Acqueduct, at Morris, has been procured, framed and delivered on the ground, and will be completed the coming winter. The cost to date is $694.04. Next year three new acqueducts will have to be built, viz: Aux Sable, Fox River and Vermilion, the timber for which a contract has been closed with Messrs. McArthur, Smith & Co., of Chicago, the same to be delivered on their dock before August 1, 1878. The approximate cost of the three is $32,000.00.

Finding that Lock No. 10 (at Marseilles) would not stand longer than the present season, we directed general superintendent William Thomas to procure bids for stone from different dealers, as per plans and specifications, drawn by chief engineer D. C. Jenne, and the same being received the contract was awarded to the Singer and Talcott Stone Co., of Lemont. The construction of said lock is now in progress, and will be completed in time for the opening of navigation. The cost of the same will be about $13,000.00, of which amount $5,965.44 has been paid, and is included in this year's expenses.

Finding the piers of the Fox River aqueduct, at Ottawa, in such a

condition that they would not, in all probability, withstand a freshet, with running ice, it was thought necessary to repair them, which has been done at a cost of $5,404.69. For particulars, see report of Superintendent.

The following bridges have been built during the past season, to-wit: One at Lemont, costing $494.50; one towpath bridge at Rock Run, costing $678.53; one towpath bridge of two spans at Channahon, costing $1,000.50; and two more, one for Aux Sable, the other one mile east of Morris, have been provided for, the material being on the ground and framed, but not yet raised. The cost of each to date is $437.

Repairs have been made on the general office, the south end being converted into a residence for the Superintendent, at a cost of $2,588.39.

Two new flat-boats have been built, costing about $500. Many other small improvements have been ordered, which are fully explained in the Superintendent's report.

OGDEN-WENTWORTH DITCH.

In regard to the Ogden-Wentworth Ditch, we would call especial attention to the report of Superintendent Thomas, in the appendix; and also the reports of former boards of commissioners on this subject. This matter is of great importance to the interests of the canal, and also to the city of Chicago, and we trust that during the coming season, some plan will be arrived at for the abatement of this nuisance.

SPRING LAKE CANAL.

In accordance with the provisions of an act passed by the last general assembly of the State of Illinois, approved May 17, 1877, in force July 1, 1877, as follows:

"SECTION 1. *Be it enacted by the people of the State of Illinois represented in the General Assembly*, That the sum of six thousand two hundred dollars ($6,200), from the net revenues of the Illinois and Michigan Canal, of the year 1877, or as much thereof as may be necessary, shall be, and the same is hereby appropriated, to be expended by the Canal Commissioners in opening an outlet from Spring Lake to the Illinois River, above the lock and dam at Copperas Creek, in such manner as will afford a safe and convenient passage for canal boats, or other water crafts of like size, to and from said lake into the Illinois River,"

The Board of Canal Commissioners, on the 10th day of August, 1877, advertised for proposals to construct said canal, in accordance with the plans and specifications on file in the office of the Chief Engineer. And on the 23d day of the same month the Board, at a meeting in Chicago, proceeded to open the bids received, and found there were five, as follows, viz.:

Patrick Delehanty, Peoria, Ill.	$5,070 00
S. C. Smith, Galesburg, Ill.	4,880 00
G. B. Cobleigh and James M. Buchanan, Pekin, Ill.	3,459 00
Archibald McArthur, Chicago, Ill.	4,416 00
Thomas Heger, Peoria, Ill., bid on excavation only	27 cents per yard.

It appearing that Messrs. Cobleigh and Buchanan were the lowest bidders, the Board awarded the contract for constructing said canal to them, at the following prices:

For grubbing and clearing	$43 00 per acre.
For chopping and clearing	24 00 "
For bailing and draining	150 00
For earth excavation	16½ cents per cubic yard.

Afterwards, finding a large unexpended balance of the conditional appropriation, the Commissioners' thought best to increase the size of the canal from (as originally planned by the Chief Engineer) twenty-two to twenty-eight feet in width (the contractors doing the extra work at original contract prices), thus giving to the people of that section a much better canal than was proposed under the enactment. This change increased the cost from $3,459 (as bid) to $3,955 35, the amount paid to the contractors.

The work was immediately commenced, pushed rapidly to completion, and settlement made on the 26th day of October, the total cost of the same being $4,585 40, including engineering and contingent expenses, to which will be added the cost of land yet to be paid for when condemned. For a full description of this work see Chief Engineers's report.

COPPERAS CREEK LOCK AND DAM.

On the 8th of November, 1877, being notified by the Chief Engineer in charge, D. C. Jenne, of the completion of the lock and dam in the Illinois river at Copperas creek, the Board proceeded to the work and found that the contractor, Archibald McArthur, had executed the work in a satisfactory manner, and the same was accepted. The total cost of the lock and dam at Copperas creek is as follows:

Amount expended by U. S. government on foundation		$62,359 80
" " " State " " "	$11,367 33	
" " " " " " contract lock and dam	306,684 10	
" " " " " " engineering	26,198 20	
" " " " " " contingent expenses	3,497 88	347,747 51
Total cost		$410,107 31
Estimated cost December 1, 1870		$427,493 00
Amount less than estimate of 1870		17,385 69

To the above amount will be added the cost of land in Tazewell county (a description of which may be found in the Chief Engineer's report) not yet condemned, and also a small amount of dredging at head and foot of the lock (referred to in Engineer's report). The cost of both will not exceed $500. There is a balance in the State treasury, after paying November and December estimates, of $723 99, which will be more than sufficient to meet these expenses, thus bringing the total cost within the amount appropriated. It is very gratifying to the Commissioners to be able to report that this important work has been completed in a substantial and satisfactory manner, at a total cost much below the original estimate.

We cannot close this report without expressing our gratification of the able manner in which the Chief Engineer, D. C. Jenne, has superintended the construction of these extensive works—the lock, dikes and dam above alluded to—and also the economical manner in which he has attended to the interests of the State.

We heartily endorse all that the Engineer has said in his report with regard to the energy and faithfulness with which the contractor, Archibald McArthur, has carried out his part of the contract.

LITTLE WABASH RIVER IMPROVEMENT.

No tolls have been collected at this point during the past year, the business having been diverted into other channels, as has been explained in former reports of the Commissioners. The only revenue now derived from this source is that paid for rent of the water power. The guard bank or levee referred to in the report of December 1, 1876, has been completed and paid for, the cost of same amounting to $208 40.

For details of the receipts and disbursements on account of this improvement the past year, reference is made to table marked "M."

All of which is respectfully submitted.

J. O. GLOVER,
MARTIN KINGMAN,
B. F. SHAW,
Canal Commissioners.

Receipts and Disbursements of the Illinois and Michigan Canal and locks at Henry and Copperas Creek, from December 1st, 1876, to November 30th, 1877, inclusive.

Balance on hand December 1, 1876, as per Canal Commissioners report, page 15		$46,489 49
RECEIPTS.		
Illinois and Michigan Canal.		
Receipts from all sources, to-wit:		
Tolls	$96,913 49	
On notes	3,718 00	
Leases of water power	6,815 07	
Leases of 90 feet strip and lots	3,625 00	
Sales of lots and lands	820 30	
Miscellaneous	2,500 78	
	$114,392 64	
Locks at Henry and Copperas Creek.		
Lockage collected at Henry	$6,062 09	
" " Copperas Creek	413 97	
		120,868 70
		$167,358 19
DISBURSEMENTS.		
Illinois and Michigan Canal.		
Total disbursements, to-wit:		
Charged to tolls and rents	$12,047 15	
Charged to maintenance and repairs	97,971 29	
Deposited in State Treasury	10,000 00	
Construction of Spring Lake Canal	4,585 40	
	$124,603 84	
Locks at Henry and Copperas Creek.		
Disbursements at Henry	$1,605 07	
Disbursements at Copperas Creek	453 48	
		$126,662 39
Balance		$40,695 80

Note—Of the above balance there is on deposit with Zell, Hotchkiss & Co., bankers, Peoria, to credit of Treasurer of Canal Commissioners. $40,642 46
And, in hands of W. T. Mason, ex-collector, not yet paid over... 53 34
$40,695 80

For details, see annexed tables marked respectively "A," "B," "C," "D," "E," "F," "G," "H," "I," "J," "K," and "L."

"A"—*Tolls on Canal.*

Date.			No. of rec'pt	Name of Collector.	Where Collected.	Amount.
1877.	March	31	27	William Milne	Lockport	$281 17
	April	30	35	Albert F. Dow	Chicago	1,898 28
	"	30	36	William Milne	Lockport	855 36
	"	30	37	W. E. Codding	Ottawa	489 10
	"	30	38	W. T. Mason	LaSalle	1,363 65
	"	30	39	W. T. House	Henry	209 69
	May	31	45	Albert F. Dow	Chicago	6,833 40
	"	31	46	William Milne	Lockport	1,835 69
	"	31	47	W. E. Codding	Ottawa	736 72
	"	31	48	W. T. Mason	LaSalle	978 10
	"	31	49	W. T. House	Henry	1,678 59
	June	30	57	Albert F. Dow	Chicago	6,247 14
	"	30	58	William Milne	Lockport	1,434 93
	"	30	59	W. E. Codding	Ottawa	693 73
	"	30	60	W. T. Mason	LaSalle	844 42
	"	30	61	W. T. House	Henry	1,947 75
	July	31	70	Albert F. Dow	Chicago	5,462 59
	"	31	71	William Milne	Lockport	2,562 16
	"	31	72	W. E. Codding	Ottawa	2,139 49
	"	31	73	W. T. Mason	LaSalle	1,991 01
	"	31	74	W. T. House	Henry	1,088 06
	August	31	82	Albert F. Dow	Chicago	6,321 47
	"	31	83	William Milne	Lockport	3,701 96
	"	31	84	W. E. Codding	Ottawa	3,677 31
	"	31	85	W. T. Mason	LaSalle	2,457 07
	"	31	86	W. T. House	Henry	1,633 62
	September	30	90	Albert F. Dow	Chicago	7,102 59
	"	30	91	William Milne	Lockport	4,424 15
	"	30	92	W. E. Codding	Ottawa	4,515 77
	"	30	93	W. T. Mason	LaSalle	687 34
	"	30	94	W. T. House	Henry	1,647 31
	October	31	101	Albert F. Dow	Chicago	6,299 98
	"	31	102	William Milne	Lockport	2,488 62
	"	31	103	W. E. Codding	Ottawa	2,245 07
	"	31	104	W. T. House	Henry	845 78
	November	30	117	Albert F. Dow	Chicago	5,195 85
	"	30	118	William Milne	Lockport	1,070 37
	"	30	119	W. E. Codding	Ottawa	836 17
	"	30	120	W. T. House	Henry	192 03
				Total		$96,913 49

"B"—*Received on Notes.*

Date.			No. of rec'pt	Name.	Remarks.	Amount.
1877	February	5	19	Union Coal Co. of Peru	Note, $1,550; interest, $93	$1,643 00
	"	8	20	G. F. Contant, Wm. Davison and Jas. Batten	" $250; " $15	265 00
	March	19	25	Chas. H. Goold	" $325; " $40 25	365 25
	April	14	29	Morris Poor	Int on note, old sale, 20 yrs time	15 12
	"	27	32	Dennis Donohue	Note, $196: interest, $11 76	207 76
	May	25	43	Thomas Davison	Final note	150 00
	June	13	51	Charles C. Smith	Note, $400; interest $48	448 00
	August	1	75	Thomas Cavanaugh, Thos. Magner and John Henebry	" $583 31 " $40 56	623 87
				Total		$3,718 00

"C."—*Leases of Water Power.*

Date.	No. of rec'pt	Name.	Location.	Amount.
1877. January 1	9	Norton & Co	Lockport	$1,368 50
" 3	12	G. W. Hyde	Dam No. 1, Joliet	681 10
" 8	15	R. Sandiford	" 2, " 2 months	50 00
" 24	17	S. D. Sprague	DuPage Dam	100 00
February 23	21	R. Sandiford	Dam No. 2, Joliet, 1 month	25 00
March 28	26	"	" " " "	25 00
April 21	30	"	" " " "	25 00
" 30	33	Ottawa Hydraulic Co	Ottawa	375 00
May 22	41	R. Sandiford	Dam No. 2, Joliet, 1 month	25 00
June 8	50	S. D. Sprague	DuPage Dam	100 00
" 22	55	R. Sandiford	Dam No. 2, Joliet, 1 month	25 00
July 2	62	Norton & Co	Lockport	1,368 50
" 3	65	G. W. Hyde	Dam No. 1, Joliet	681 10
August 10	78	Heirs of L. P. Sanger	Back rent at Dam No. 2, Jolict	1,465 87
" 24	80	R. Sandiford	Dam No. 2, Joliet, 1 month	25 00
September 12	89	"	" " 2 "	50 00
October 12	97	"	" " 1 "	25 00
" 31	98	Ottawa Hydraulic Co	Ottawa	375 00
November 26	114	R. Sandiford	Dam No. 2, Joliet, 1 month	25 00
			Total	$6,815 07

"D."—*Leases of 90 feet strip and lots.*

Date.	No. of rec'pt	Name.	Location.	Amount.
1876. December 14	3	M. C. Fallansbee	Near Willow Springs	$20 00
" 14	4	F. Mehring	" "	20 00
" 29	8	Lockport Paper Co	Lots on blocks 122, 124, 126 and 127, Lockport	80 00
1877. January 2	11	Michael Shehan	Triangular lot at Bridgeport	50 00
" 5	13	Sherwood School Fur. Co.	Morris	100 00
" 6	14	F. Morrisette & P. Poulliot	Bridgeport	25 00
" 24	18	J. C. McMullin	Near Lemont	50 00
February 24	22	John J. Carey	Lot 10, block 126, LaSalle	15 00
March 3	24	Adam Smith	Hydraulic property and lots adjoining, at Bridgeport	1,250 00
April 30	34	John T. Randall	Strip in sw¼ 17,34,9, Channahon	5 00
June 15	53	James Clark & Son	Utica	50 00
" 20	54	Singer & Talcott Stone Co	Near Lemont	50 00
" 27	56	C. E. Ward	Strip near Guard Lock, Joliet	100 00
July 2	63	Norton & Co	Strip east of lot 1. Lots 2, 3, and 5, block 122, and reserved ground, Lockport	200 00
" 3	64	W. N. Thompson	Utica	50 00
" 24	67	W. A. Steel	South Lockport	25 00
August 6	77	Griffin & Connelly	Willow Springs	50 00
" 29	81	Nathaniel Blanchard	LaSalle	100 00
September 8	88	Adam Smith	Hydraulic property and lots adjoining, at Bridgeport	1,250 00
October 2	95	N. J. Brown	Lemont	50 00
" 31	99	M. Truby & Son	Strip at head of Kankakee feeder	10 00
November 23	111	A. S. Piper & Co	Near Willow Springs	75 00
			Total	$3,625 00

"E."—*Sales of lots and lands.*

Date.	No. of rec'pt	Name.	Description.		Amount.
			LOTS.		
1877. January 23	16	John W. Day	Lot 13, block 38, LaSalle	$25 00	
May 23	42	Jeremiah Lean	Lot 6, block 58, LaSalle	225 00	
					$250 00
			LAND.		
April 24	31	Henry J. Barker	Sw¼ ne¼, 27. 33, 1	40 acres.	570 30
			Total		$820 30

"F."—*Miscellaneous.*

Date.	No. of rec'pt	Name.	From what received.		Amount.
1876. December 9	2	E. Porter	Lease of ice at Joliet	$33 33	
" 19	5	Henry Holmes	" " Ottawa	185 00	
" 21	6	H. A. Shuler	" " "	199 00	
1877. January 1	10	F. X. Lafontaine	" " Joliet	66 66	
November 17	106	Huse, Loomis & Co	" " LaSalle	70 00	
" 21	108	Henry Holmes	" " Ottawa	185 00	
" 21	109	John M. Welch	" " LaSalle	110 00	
" 22	110	Lewis Gebhard	" " Morris	19 00	
" 24	112	M. & W. Callaghan	" " LaSalle	100 00	
					$967 99
May 31	44	Corn Ex. Nat. Bank, Chi.	Interest on ac't. from Dec. 1, 1876, to May 31, 1877	$433 91	
June 13	52	" " "	Interest on ac't. from May 31, to June 13, 1877	20 65	
July 4	66	Zell, Hotchkiss & Co	Interest on ac't. from June 13 to July 4, 1877	36 70	
August 4	76	" "	Interest on ac't. from July 4 to August 4, 1877	67 07	
September 5	87	" "	Interest on ac't. from August 4 to September 5, 1877	99 81	
October 2	96	" "	Interest on ac't. from Sept. 5 to October 2, 1877	106 90	
" 31	100	" "	Interest on ac't. from Oct. 2 to Oct. 31, 1877	136 80	
November 30	116	" "	Interest on ac't. from Oct. 31 to Nov. 30, 1877	135 44	
					1,037 28
1876. December 1	1	Oscar Korah	Assistance from State hands to boat "Montreal,"		25 00
" 27	7	Illinois Stone Co	Wheelbarrow handles sold them		18 00
1877. May 14	40	Alexander Reid	Error in pay-roll		22 81
July 27	68	W. A. Steel	Repairs on trucks		67 47
" 31	69	Steamer "Illinois,"	Passenger fares during railr'd strike		29 75
August 23	79	J. O. Pierson	Assistance taking bridge out of canal		28 00
November 21	107	H Burrell & Co	Damage to lock by boat "Cashier."		32 00
" 24	113	Trustees town of Lemont	Building sidewalk to canal bridge		100 00
" 30	115	William Milne, Collector	Account of "Old Material" sold		172 48
			Total		$2,50 78

"G."—*Charged to Tolls.*

Date.	No. of vochr	Name.	For what expended.	Amount.
1876. Dec. 31	1	William Thomas	Pay-roll for labor	$826 67
1877. Jan. 31	48	" "	" "	826 67
Feb. 28	104	" "	" "	826 67
March 31	158	" "	" "	844 17
" 31	209	Dean Bros. & Hoffmann	Collectors books and blanks	197 65
April 30	213	William Thomas	Pay-roll for labor	1,146 67
May 31	288	" "	" "	1,146 67
June 30	346	" "	" "	1,096 67
July 30	396	" "	" "	1,006 67
" 30	446	Telegraph and Herald Co.	Printing toll sheets and letter heads	42 50
August 30	447	William Thomas	Pay-roll for labor	1,006 67
" 30	498	Kingman & Co	Clerical assistance to Treas. 3 mo's	90 00
Sept. 30	499	William Thomas	Pay-roll for labor	953 33
Oct. 31	543	" "	" "	926 67
" 31	592	Sloan, Johnson & Co	Rebate on toll on salt	75 35
Nov. 30	595	William Thomas	Pay-roll for labor	926 67
" 30	651	Albert F. Dow	Coal, expressage, R. R. fare, station'y	15 45
" 30	652	Kingman & Co	Clerical assistance to Treas. 3 mo's	90 00
" 30	653	Peoria Transcript Co	Advertising closi'g of canal naviga'n	2 00
				$12,047 15
			DEPOSITS IN STATE TREASURY.	
Feb. 10	103	Edward Rutz, State Treas.	Deposits in State Treasury $3,000	
Nov. 30	594	" " "	" " " " 7,000	
				10,000 00
			SPRING LAKE CANAL.	
Oct. 31	593	Martin Kingman, Treas.	Amount expended in construction of Spring Lake Canal	4,585 40
			Total	$26,632 55

"H."—*Maintenance and Repairs.*

Date.	No. of vochr	Name.	For what expended.	Amount.
1876. Dec. 31	2	C. A. Welch	Pay-roll for labor	$789 30
" 31	3	Henry G. Eddy	" "	953 75
" 31	4	William Keough	" "	618 25
" 31	5	Almond Thomas	" "	730 25
" 31	6	W. B. Titus	" "	436 50
" 31	7	Scott R. Wilder	" "	620 00
" 31	8	James A. Watson	" "	568 15
" 31	9	Samuel N. Watson	" "	750 50
" 31	10	W. E. Codding	" "	874 00
" 31	11	Daniel C. Hays	" "	630 59
" 31	12	Western Union Teleg. Co.	Telegrams during November, 1876	16 69
" 31	13	Wells, French & Co	Aqueduct castings	168 20
" 31	14	Singer & Talcott Stone Co.	Shieves	20 00
" 31	15	George Gaylord & Co	Bedding, siding, coal	35 72
" 31	16	D. C. Baldwin	Bolts, iron, locks, nails, pipe	31 46
" 31	17	Rupley & Son	Rags, screws, repairs, nails	6 90
" 31	18	Abe Rupley	Axes, screws, lock	4 35
" 31	19	H. S. Mason	Hay	38 76
" 31	20	William Cameron	Wagon	85 00
" 31	21	F. G. Harris, P. M.	Postage	31 74
" 31	22	Chicago and Alton R. R.	Freight	12 49
" 31	23	United States Express Co.	Expressage	33 05
" 31	24	W. A. Steel	Iron. stone	387 34
" 31	25	Joliet Iron and Steel Co.	Steel	3 00
" 31	26	Brooks & Co	Nails, shovels, picks, files, iron	66 74
" 31	27	Joseph Duso	Use of boat "W. A. Steel."	120 00
" 31	28	E. E. Bates	Blacksmith work	12 55

Statement—Continued.

Date.	No. of v'chr.	Name.	For what expended.	Amount.
1876. Dec. 31	29	Silas Munson	Ear corn	$7 00
" 31	30	Charles C. Smith	Hay	138 39
" 31	31	Thomas Cantwell	Hay	7 00
" 31	32	B. F. Hall	Oats, corn	19 85
" 31	33	Neff & Taylor	Stove, pick handles, hatchet	12 10
" 31	34	Daniel C. Hays	Freight, drayage, coal, paint	11 76
" 31	35	Haeberlin Bros	Shovels, picks, nails, hammer	33 46
" 31	36	Manley & Smeeton	Iron, picks, nails, screws, repairs	58 78
" 31	37	S. E. Dewey	Bolts, boiler, pipe	39 25
" 31	38	E. Rose	Powder, fuse, repairing scales	68 80
" 31	39	George Bennett	Crockery	6 50
" 31	40	W. H. Hull	Bedding	12 30
" 31	41	William Duckett	Coal	15 00
" 31	42	J. R. Cameron, P. M.	Stamped envelopes	16 50
" 31	43	W. B. Titus	R. R. fare, express., postage, repairs.	15 76
" 31	44	Scott R. Wilder	Horse shoeing, blacksmithing	5 15
" 31	45	Capt. J. Shafer	Fine refunded	10 00
" 31	46	Morse & Kentner	Horse blankets	2 76
1877. Jan. 31	49	C. A. Welch	Pay-roll for labor	788 33
" 31	50	Henry G. Eddy	" "	729 47
" 31	51	Almond Thomas	" "	862 25
" 31	52	W. B. Titus	" "	425 25
" 31	53	Scott R. Wilder	" "	703 64
" 31	54	J. A. Watson	" "	684 40
" 31	55	Samuel N. Watson	" "	885 90
" 31	56	W. E. Codding	" "	1,603 01
" 31	57	Daniel C. Hays	" "	634 83
" 31	58	Western Union Teleg. Co.	Telegrams during December, 1876	3 19
" 31	59	Atlantic & Pacific Tel. Co.	" " Dec.'76 and Jan.'77	9 73
" 31	60	"Chicago Eve'g. Journal."	Printing synopsis of reports	37 20
" 31	61	Heald, Sisco & Co	Iron and brass castings	9 75
" 31	62	J. W. Thomas	Oak lumber	242 05
" 31	63	Norton & Co	Lumber, oil, paint, brooms	71 12
" 31	64	George B. Martin	Corn, coal, oats	42 53
" 31	65	Dr. W. Bradley	Glass, paint, stationery	26 48
" 31	66	A. J. Wadsworth	Straps, whips, repairs	9 60
" 31	67	Frank Granger	Oak lumber	85 60
" 31	68	Theodore Harder	Oak logs	15 00
" 31	69	James Bruce	One oak log	7 00
" 31	70	William Thomas	R. R. fare, livery, exchange	15 50
" 31	71	C. A. Welch	" " nails	15 95
" 31	72	Chicago and Alton R. R.	Freight	109 06
" 31	73	United States Express Co.	Expressage	9 20
" 31	74	W. A. Steel	Stone	473 30
" 31	75	Brooks & Co	Files, iron	30 98
" 31	76	Knapp & Thayer	Lumber	3 45
" 31	77	C. and C. E. Fowler	Oil, lamp chimneys, brooms	8 83
" 31	78	Thomas Cantwell	Hay	5 65
" 31	79	James Handlom	Hay	9 87
" 31	80	Irons, Riddle & Co	Nails	3 25
" 31	81	B. F. Hall	Oats, corn, blacksmithing	18 43
" 31	82	Norman Cotner	Hay	15 00
" 31	83	Seneca Coal Co	Coal	8 68
" 31	84	Daniel McNeal	Blacksmithing	5 25
" 31	85	E. Y. Keagle	"	14 65
" 31	86	Daniel C. Hays	Drayage, paint, freight	9 49
" 31	87	Strawn & Powell	Lumber	41 73
" 31	88	Manley & Smeeton	Picks, iron, bolts, chain	26 38
" 31	89	Child & Phipps	Rubber boots	7 50
" 31	90	Haeberlin Bros	Picks, shovels, iron, steel	25 18
" 31	91	John N. Shuler	Lumber	119 95
" 31	92	E. Rose	Powder, fuse	30 00
" 31	93	William Stormont	Castings, foundry work, lock, valves	159 35
" 31	94	W. H. Cary	Salt, pails	4 75
" 31	95	O. H. Buell	Hay	21 43
" 31	96	Daniel Cahill	Coal	18 00
" 31	97	John Murphy	Coal	3 59
" 31	98	William Sinnott	Sand	13 50
" 31	99	C., R. I. and P. R. R.	Freight	56 04
" 31	100	W. B. Titus	R. R. fare, freight, expressage	12 45
" 31	101	John Lyle	Corn	9 60
1877. Feb. 28	105	C. A. Welch	Pay-roll for labor	725 02
" 28	106	Henry G. Eddy	" "	369 57
" 28	107	William Keough	" "	658 75
" 28	108	Almond Thomas	" "	740 54
" 28	109	W. B. Titus	" "	367 38
" 28	110	Scott R. Wilder	" "	652 63
" 28	111	James A. Watson	" "	834 95
" 28	112	Samuel N. Watson	" "	1,014 17

Statement—Continued.

Date.	No. of veh'r.	Name.	For what expended.	Amount.
1877. Feb. 28	113	Harry White	Pay-roll for labor	$133 50
" 28	114	E. L. Stevens	" "	299 25
" 28	115	Thomas Smith	" "	710 39
" 28	116	W. E. Codding	" "	1,692 01
" 28	117	Lewis Cook	" "	414 00
" 28	118	Daniel C. Hays	" "	749 11
" 28	119	Western Union Teleg. Co.	Telegrams during January, 1877	3 36
" 28	120	Gilbert, Hubbard & Co	Sail twine, pitch, oakum	40 00
" 28	121	John Alston & Co	Varnish	5 50
" 28	122	J. W. Thomas	Oak lumber	188 93
" 28	123	Norton & Co	Lumber, paint, wagon grease	80 40
" 28	124	D. C. Baldwin	Nails, bolt, iron	28 03
" 28	125	Dr. W. Bradley	Oil, lead, stationery	45 08
" 28	126	Almond Thomas	Freight, oil, extra board of men	27 05
" 28	127	Chicago and Alton R. R.	Freight	73 63
" 28	128	W. A. Steel	Stone, iron	284 26
" 28	129	Brooks & Co	Shovels, iron, steel, nails	155 77
" 28	130	G. D. A. Parks	Legal services	35 00
" 28	131	Robert Clow, Circuit Clerk	Court costs	18 45
" 28	132	E. L. Stevens	Use of derricks and mason's tools	10 00
" 28	133	James Handlon	Hay	10 00
" 28	134	Albert Johnson	Corn	10 14
" 28	135	Daniel C. Hays	Drayage, coal, paint	8 16
" 28	136	James G. Scott	Lumber	25 74
" 28	137	Strawn & Powell	Oats, lumber, doors, windows	175 53
" 28	138	H. A. Shuler	Lumber	8 35
" 28	139	John N. Shuler	"	24 41
" 28	140	Haeberlin Bro's	Shovels, picks, nails, iron	50 42
" 28	141	John Leonard	Blacksmith work	60 89
" 28	142	E. Y. Griggs	Oil, lead, lamp chimneys	10 33
" 28	143	John Vette	Use of blacksmith forge and coal	19 24
" 28	144	Daniel Cahill	Coal, hay	6 00
" 28	145	J. R. Cameron, P. M	Postage	51 50
" 28	146	C., R I. and P. R. R	Freight	60 22
" 28	147	W. B. Titus	R. R. fare, telegrams, freight, exp'ge.	30 46
" 28	148	Scott R. Wilder	" oats, freight, blacksmi'ng	7 85
" 28	149	Western Cement Co	Cement	42 15
" 28	150	Harry White	Clay, sharpening picks	2 10
" 28	151	E. E. Taylor	Coal	3 47
" 28	152	Michael Byrne	Lumber	73 37
" 28	153	Joseph Utley	Expense as Commissioner 3 months	27 35
" 28	154	W. N. Brainard	" " "	89 40
" 28	155	H. G. Anderson	" " "	68 45
" 28	156	Mrs. M. Anderson	Rent of Treasurer's office 3 months	25 00
Mar. 31	159	C. A. Welch	Pay-roll for labor	662 82
" 31	160	Henry G. Eddy	" "	433 65
" 31	161	William Keough	" "	314 73
" 31	162	Almond Thomas	" "	276 90
" 31	163	W. B. Titus	" "	445 13
" 31	164	Scott R. Wilder	" "	202 23
" 31	165	James A. Watson	" "	330 97
" 31	166	Harry White	" "	63 21
" 31	167	W. E. Codding	" "	92 75
" 31	168	Samuel N. Watson	" "	334 07
" 31	169	Thomas Smith	" "	80 83
" 31	170	Moses Y. Moody	" "	78 14
" 31	171	Lewis Cook	" "	106 34
" 31	172	Daniel C. Hays	" "	362 98
" 31	173	Western Union Teleg. Co.	Telegrams during Feb., 1877	3 49
" 31	174	Atlantic & Pacific Tel. Co.	" " " and Mar., 1877	11 87
" 31	175	Lee & Dickinson	Oak lumber	29 10
" 31	176	Norton & Co	Oak & pine lumber, rope, bro'ms, coal	290 68
" 31	177	George B. Martin	Corn, oats, lumber, coal	87 49
" 31	178	George Gaylord & Co	Lumber, coal	5 65
" 31	179	Dr. W. Bradley	Glass, paint, stationery	10 30
" 31	180	Abe Rupley	Nails, iron, repairs, bolts	37 65
" 31	181	Julius Scheibe	Brick, stone, sand, labor	39 36
" 31	182	F. G. Harris, P. M	Postage	19 45
" 31	183	Chicago and Alton R. R.	Freight	3 77
" 31	184	William Thomas	Stone	133 50
" 31	185	William Milne	Railroad fare	36 80
" 31	186	W. A. Steel	Stone	214 00
" 31	187	Brooks & Co	Iron, rope, lead, stove, bolts	188 32
" 31	188	J. Q. A. King, Ag't	Blossburg coal	6 39

Statement—Continued.

Date.	No. of vch'r	Name.	For what expended.	Amount.
1877. Mar. 31	189	J. Whittier & Co	Lime	$3 20
" 31	190	H. Humphrey	Castings	15 16
" 31	191	H. A. Pitts Son's Mfg. Co	Oak lumber	5 45
" 31	192	T. W. Pitcher	Salt, pails, broom, powder	12 85
" 31	193	J. C. Parsons	Paint, oil	15 75
" 31	194	E. F. Keagle	Blacksmith work	34 70
" 31	195	Daniel C. Hays	Freight, drayage, use of tools	8 00
" 31	196	W. M. Rabb	Hay	5 39
" 31	197	Phillips & Co	Lumber	7 30
" 31	198	E. E. Perley	"	46 83
" 31	199	Maierhoffer & Jordan	Oak lumber	15 40
" 31	200	Forbes & Gehring	Oil, paint, putty	19 62
" 31	201	Manley & Smeeton	Steel, iron, nails, shovels	70 38
" 31	202	Osman & Hapeman	Printing, wall paper, stationery	79 74
" 31	203	C., R, I. and P. R. R.	Freight	61 85
" 31	204	W. B. Titus	" R.R. fare, blacksmithi'g, exp'ge.	24 36
" 31	205	James A. Watson	" telegraphing	7 05
" 31	206	Western Cement Associa'n	Cement	759 40
" 31	207	W. N. Brainard	Expenses as Commissioner	15 20
" 31	208	John Alston & Co	Oil	41 91
April 30	214	C. A. Welch	Pay-roll for labor	943 15
" 30	215	Henry G. Eddy	" "	1,160 82
" 30	216	William Keough	" "	1,137 99
" 30	217	Almond Thomas	" "	977 70
" 30	218	Edward Gay	" "	816 91
" 30	219	Alexander Reid	" "	403 76
" 30	220	W. B. Titus	" "	522 21
" 30	221	Scott R. Wilder	" "	430 38
" 30	222	Samuel N. Watson	" "	435 68
" 30	223	James A. Watson	" "	123 44
" 30	224	W. E. Codding	" "	59 89
" 30	225	Moses Y. Moody	" "	93 49
" 30	226	Jesse Green	" "	64 02
" 30	227	Daniel C. Hays	" "	119 75
" 30	228	Western Union Teleg. Co	Telegrams during March, 1877	3 76
" 30	229	Atlantic & Pacific Tel. Co	" " April, 1877	21 11
" 30	230	Gilbert, Hubbard & Co	Rope	37 97
" 30	231	Crane Bro's. Mfg. Co	Repairs and fixtures for steamboat	9 42
" 30	232	Owen Owens	Guage glasses, packing, hose	48 70
" 30	233	S. Q. Perry	Lumber	581 89
" 30	234	Alexander Reid	Stone, use of boats, R. R. fare	129 00
" 30	235	Singer & Talcott Stone Co	" " labor of men	778 25
" 30	236	Adam Funk	Stone	510 00
" 30	337	John Mallon	Hay	22 00
" 30	238	Norton & Co	Lumber, coal, rope, oil, oats, corn	300 64
" 30	239	George B. Martin	Blossburg coal, oats, corn	125 11
" 30	240	D. C. Baldwin	Bolts, iron, shovels, pump	37 71
" 30	241	Abe Rupley	Bolts, labor, axes, shovels	56 72
" 30	242	Dr. W. Bradley	Lead, oil, stationery	16 05
" 30	243	A. J. Wadsworth	Straps, repairs on harness	16 70
" 30	244	John Geddes	Tallow	8 00
" 30	245	Chicago and Alton R. R.	Freight	14 10
" 30	246	United States Express Co	Expressage	14 65
" 30	247	C. A. Welch	Axe handles, freight, R. R. fare	18 80
" 30	248	Henry G. Eddy	Extra board of men, " "	56 56
" 30	249	William Keough	" "	47 57
" 30	250	Almond Thomas	" " stabling, rope	45 32
" 30	251	Joseph Duso	Use of boat "W. A. Steel."	60 00
" 30	252	W. A. Steel	Stone	295 43
" 30	253	Joliet Iron and Steel Co	Iron, labor	6 95
" 30	254	Brooks & Co	Iron, nails, pipe, steel	262 72
" 30	255	J. Q. A. King, ag't	Blossburg and Springfield coal	19 93
" 30	256	R. Sandiford	Brass castings	2 00
" 30	257	Henry Watkins	Brooms	4 50
" 30	258	Bruce Coal Mining Co	Coal	24 00
" 30	259	John Nelson	Lumber	4 09
" 30	260	Scott & Harrington	" oats, corn	26 57
" 30	261	James G. Scott	"	54 02
" 30	262	Neff Bro's	Sulphur flour	7 70
" 30	263	Reed & Good	Bolts, nails	99
" 30	264	E. Y. Keagle	Blacksmith work	22 70
" 30	265	Alexander Rollo	" "	15 27
" 30	266	Nicholas Loaf	Clearing field at Marseilles	20 00
" 30	267	D. Hurd	Blacksmithing	4 60
" 30	268	Daniel C. Hays	Use of tools, freight, drayage	2 82

Statement—Continued.

Date.	No. of vch'r	Name.	For what expended.	Amount.
1877. April 30	269	Seneca Coal Co	Coal	$3 20
" 30	270	Strawn & Powell	Lumber, oats, hay	155 18
" 30	271	Child & Phipps	Rubber boots	48 95
" 30	272	Manley & Smeeton	Shovels, iron, tiles, rope	31 54
" 30	273	S. E. Dewey	Locks, spike, boiler	36 00
" 30	274	John N. Shuler	Lumber	22 46
" 30	275	John G. Nattinger	Blossburg coal	2 50
" 30	276	C. Hahn	Repairing wagon and sleigh	5 75
" 30	277	Fred Rowe	Brooms	6 00
" 30	278	B. F. Canders	Plastering, mortar	118 84
" 30	279	Robert Nicholson	Freight on lumber on boat	58 19
" 30	280	John R. Cameron, P. M.	Postage stamps	46 18
" 30	281	W. B. Titus	Freight, expressage, R. R. fare	18 84
" 30	282	W. E. Codding	Fuse, expressage, telegraphing	6 62
" 30	283	Scott R. Wilder	Extra board of men	15 33
" 30	284	Samuel N. Watson	" " " R. R. fare, hay	15 07
" 30	285	James A. Watson	Telegraphing, stabling, R. R. fare	2 25
" 30	286	Revolving Scraper Co	Wheelbarrows	72 00
" 30	287	H. G. Anderson	Expenses as Commissioner, 2 mo's	25 10
May 31	288	William Thomas	Pay-roll for labor	248 33
" 31	289	C. A. Weleh	" "	692 00
" 31	290	Henry G. Eddy	" "	1,004 20
" 31	291	William Keough	" "	673 30
" 31	292	Almond Thomas	" "	486 03
" 31	293	W. B. Titus	" "	639 50
" 31	294	Seott R. Wilder	" "	401 92
" 31	295	James A. Watson	" "	500 35
" 31	296	Jesse Green	" "	91 12
" 31	297	Western Union Teleg. Co	Telegrams during April, 1877	19 85
" 31	298	Atlantic & Pacific Tel. Co.	" " May, 1877	5 76
" 31	299	Charles Reitz & Bro's	Lumber	138 32
" 31	300	Gilbert, Hubbard & Co	Dredge chain, rope, oakum, pitch	117 55
" 31	301	John Alston & Co.	Oil	9 70
" 31	302	Illinois Stone Co	Stone	115 00
" 31	303	J. W. Thomas	Oak and ash lumber	159 57
" 31	304	Adam Funk	Stone	60 00
" 31	305	Norton & Co	Lumber, coal, oil, nails	128 47
" 31	306	George B. Martin	Shingles, coal, corn, oats	159 98
" 31	307	D. C. Baldwin	Bolts, iron, nails, axes	27 37
" 31	308	Abe Rupley	" " " labor	44 09
" 31	309	C. H. Bacon & Co	Oil, lead, glass	40 04
" 31	310	A. P. Granger	Oak lumber	98 73
" 31	311	Orange Thomas	One team, mules and harness	200 00
" 31	312	Mrs. Olive Ingraham	Making bedding	2 22
" 31	313	Chicago and Alton R. R.	Freight	49 86
" 31	314	Elisha Sly	Freight on steamer "Dr. Hanley."	5 07
" 31	315	Henry G. Eddy	Extra board of men, R. R. fare	38 90
" 31	316	William Keough	" "	38 54
" 31	317	Almond Thomas	" " stabling, coal	28 12
" 31	318	Brooks & Co	Nails, stove castings	103 45
" 31	319	J. Q. A. King, Ag't	Blossburg coal	9 50
" 31	320	Joseph Duso	Freight on lumber on boat	13 83
" 31	321	Irons, Riddle & Co	Nails, trowels	6 25
" 31	322	John Nelson	Lumber	28 12
" 31	323	B. F Hall	Corn, oats	5 80
" 31	324	Bruce Coal Mining Co	Coal	70 08
" 31	325	Forbes & Gehring	Oil, lead, putty, brushes	21 78
" 31	326	Haeberlin Bro's.	Nails, lead, iron, bolts	27 14
" 31	327	Manley & Smeeton	Locks, steel, " "	15 74
" 31	328	Weiss & Wolf	Briek	12 60
" 31	329	J. N. Shuler	Lumber	51 28
" 31	330	Charles N. Force	Spike	48 00
" 31	331	William Stormont	Castings, lock valve, foundry work	42 05
" 31	332	John Leonard	Blaeksmith work	36 25
" 31	333	Jeremiah Wood	Bran	4 10
" 31	334	C., B. and Q. R. R.	Freight on oak lumber	78 08
" 31	335	W. B. Titus	R. R. fare, freight, expressage	21 81
" 31	336	Scott R. Wilder	Extra board of men, repairs, brooms	22 48
" 31	337	James A. Watson	" " " R. R. fare	23 65
" 31	338	Jesse Green	Stone	120 00
" 31	339	Utica Cement Association	Cement	136 51
" 31	340	George Meakin	Freight on cement on boat	10 00
" 31	341	Joseph Utley	Expenses as Commissioner, 3 mo's	35 95
" 31	342	W. N. Brainard	" " 2 "	4 00
" 31	343	H. G. Anderson	" " 1 "	17 50
" 31	344	Mrs. M. Anderson	Rent of treasurer's office, 3 "	24 17
" 31	345	B. F. Shaw	Expenses as Commissioner, 1 "	21 75

Statement—Continued.

Date.	No. of vch'r.	Name.	For what expended.	Amount.
1877. June 30	346	William Thomas	Pay-roll for labor	$248 33
" 30	347	C. A. Welch	" "	672 94
" 30	348	Henry G. Eddy	" "	934 32
" 30	349	William Keough	" "	512 25
" 30	350	Almond Thomas	" "	405 40
" 30	351	W. R. Titus	" "	454 25
" 30	352	Scott R. Wilder	" "	416 01
" 30	353	James A. Watson	" "	662 66
" 30	354	Western Union Telg'h Co.	Telegrams during May, 1877	8 21
" 30	355	Atlantic & Pacific "	" " June, "	4 87
" 30	356	John Alston & Co	Oil	26 34
" 30	357	Brackebush, Dickson & Co.	Coal	53 83
" 30	358	S. Q. Perry	Lumber	328 03
" 30	259	J. M. Warren & Co.	One die for bolt cutter	2 50
" 30	360	Peter Green	Hay	6 50
" 30	361	Norton & Co.	Lumber, coal, nails, corn	104 83
" 30	362	George Gaylord & Co	" toweling	8 89
" 30	363	D. C. Baldwin	Nails, iron, oil, twine	22 07
" 30	364	Dr. W. Bradley	Oil, lead, stationery	22 89
" 30	365	A. J. Wadsworth	Repairs on harnes, whip, collar	12 23
" 30	366	Henry G. Eddy	Extra board of men	32 13
" 30	367	William Keough	" "	26 46
" 30	368	Almond Thomas	" " oats,stab'g,nails	31 38
" 30	369	Chicago & Alton R.R.	Freight on coal and chain	13 63
" 30	370	Brooks & Co	Iron	12 59
" 30	371	Simpson & Murphy	Repairs on steam'r "Illinois," iron	45 50
" 30	372	J. Q. A. King	Blossburg coal	8 00
" 30	373	James Smith	Blacksmith work	6 00
" 30	374	Bruce Coal Mining Co	Coal	23 82
" 30	375	Sherwood Sch'l Fur. Co.	Sawing lumber	6 00
" 30	376	J. N. Shuler	Shingles "	19 44
" 30	377	Manley & Smeeton	Nails, stovepipe, bolts	13 91
" 30	378	Phillips Bro's	Pails	2 75
" 30	379	William Stomont	Lock valves, castings	98 70
" 30	380	Edmund Davy	Hay	14 17
" 30	381	J. G. Nattinger	Coal	7 93
" 30	382	Robert Cannon	"	2 00
" 30	383	S. P. Couch	Repairing harness, brush, halter	20 58
" 30	384	W. H. Hull	Matting, carpet	9 22
" 30	385	Andrew Lynch	Freight on lumber on boat	24 84
" 30	386	J. M. Foster	" " "	2 00
" 30	387	J. R. Cameron, P. M.	Postage stamps	18 00
" 30	388	C. R. I. & P R. R.	Freight	9 01
" 30	389	W. B. Titus	R. R. fare, blacksmithing, drayage	7 40
" 30	390	Scott R. Wilder	Extra board of men	21 27
" 30	391	J. A. Watson	" " "	21 73
" 30	392	Jesse Green	Cement, stone	249 70
" 30	393	Daniel C. Jenne	Expenses as canal engineer	13 50
" 30	394	Martin Kingman	" " commissioner	58 55
" 30	395	J. O. Glover	" " "	19 53
July 31	396	William Thomas	Pay-roll for labor	290 00
" 31	397	C. A. Welch	" "	614 63
" 31	398	Henry G. Eddy	" "	799 35
" 31	399	William Keough	" "	419 13
" 31	400	Almond Thomas	" "	466 41
" 31	401	W. B. Titus	" "	581 87
" 31	402	Scott R. Wilder	" "	353 20
" 31	403	James A. Watson	" "	367 60
" 31	404	Western Union Telg'h Co.	Telegrams during June, 1877	8 35
" 31	405	Atlantic & Pacific "	" " July, "	8 22
" 31	406	Gilbert, Hubbard & Co	Repairing blocks, chain, cop'r,rope	128 09
" 31	407	Brackebush, Dickson & Co.	Coal	37 57
" 31	408	B. G. Gill & Co	Oak lumber	18 60
" 31	409	S. D. Kimbark	Bolts, washers	5 73
" 31	410	Owen Owens	Valve packing	3 40
" 31	411	Norton & Co	Lumber, shingles, oil, nails, corn	78 19
" 31	412	George B. Martin	Coal, oats, ear corn	23 52
" 31	413	D. C. Baldwin	Steel, bolts, iron, nails	15 43
" 31	414	Abe Rupley	Repairs, bolts, screws, nails	22 88
" 31	415	C. H. Bacon & Co	Lead, oil, brush	8 80
" 31	416	Dr .W. Bradley	" " stationery	12 27
" 31	417	Boyer & Corneau	One mule	63 23
" 31	418	A. L. Tupper	Hay	23 66
" 31	419	Chicago & Alton R. R.	Freight	1 19
" 31	420	United States Express Co.	Expressage	5 25
" 31	421	C. A. Welch	R. R. fare, oil cup	5 45

Statement—Continued.

Date.	No. of v'chr.	Name.	For what expended.	Amount.
1877. July. 31	422	Almond Thomas	Stabling, oats, hay, shoeing	$15 98
" 31	423	W. A. Steele	Stone	1,465 87
" 31	424	Joseph Duso	Taking stone on boat "W. A. Steel."	60 00
" 31	425	John Parr	" " " "Mary O'Riley."	130 00
" 31	426	M. B. Miller	" " cars on boat "Nashotah"	3 00
" 31	427	Brooks & Co	Steel, fire brick, wrench, files	22 07
" 31	428	E. E. Bates	Blacksmithing	13 20
" 31	429	John Neslon	Lumber	35 62
" 31	430	Strawn & Powell	Windows, planing, sawing	28 04
" 31	431	Manley & Smeeton	Steel, bolts, ropes, stove	47 00
" 31	432	Shuler & Rathburn	Oats, hay	43 59
" 31	433	Haeberlin Bros	Rope, iron, nails, scythes	16 85
" 31	434	J. N. Shuler	Lumber	85 55
" 31	435	E. Y. Griggs	Lead, glass, oil, putty	17 25
" 31	436	William Stormont	Castings and foundry work	11 90
" 31	437	J. G. Nattinger	Blossburg coal	3 00
" 31	438	J. D. Vette	Repairs on wagons	14 15
" 31	439	John Huston	Mortar, brick	7 50
" 31	440	Robert Morrison	Railroad fare	1 50
" 31	441	W. B. Titus	" " freight, drayage, postage	21 53
" 31	442	Western Cement Associa'n	Cement	95 41
" 31	443	Kingman & Co	Stamped envelopes, expressage, stationery	38 20
" 31	444	Henry S. Hill	Stationery, printing	12 50
" 31	445	D. H. Tripp & Co	" "	8 60
1877. Aug. 31	447	William Thomas	Pay-roll for labor	290 00
" 31	448	James M. Leighton	"	677 82
" 31	449	Henry G. Eddy	"	910 53
" 31	450	William Keough	"	428 50
" 31	451	Almond Thomas	"	772 40
" 31	452	W. B. Titus	"	403 38
" 31	453	Scott R. Wilder	"	381 64
" 31	454	James A. Watson	"	346 92
" 31	455	Robert Morrison	"	370 50
" 31	456	Western Union Tel. Co.	Telegrams during July, 1877	2 50
" 31	457	Atlantic & Pacific Tel. Co.	" " August, 1877	5 78
" 31	458	Gilbert, Hubbard & Co	Wire and manilla rope	20 03
" 31	459	John Alston & Co	Oil	18 39
" 31	460	Brackebush, Dickson & Co	Blossburg and Indiana block coal	138 02
" 31	461	Singer & Talcott Stone Co.	One stone jack	70 00
" 31	462	J. P. Doig	Re-cutiing files	18 36
" 31	463	John W. Thomas	Oak lumber	103 80
" 31	464	George B. Martin	Lumber, oats, corn, coal, matches	90 23
" 31	465	Dr. W. Bradley	Oil, stationery	9 20
" 31	466	A. J. Wadsworth	Saddle, whip, repairs to harness	21 40
" 31	467	A. P. Granger	Oak lumber	35 00
" 31	468	A. L. Tupper	Hay	4 52
" 31	469	John Geddes	Tallow	7 58
" 31	470	Chicago & Alton R. R.	Freight	36 98
" 31	471	Orange Thomas	Coal, bolts, tallow' nails, labor	9 82
" 31	472	Almond Thomas	Oil, repairs, oats	17 80
" 31	473	Brooks & Co	Nails, iron, bolts	20 18
" 31	474	Wm. Davidson & Bro	Stone	387 00
" 31	475	Joseph Duso	Use of boat "W. A. Steel"	110 00
" 31	476	John Parr	" " "Mary O'Riley"	100 00
" 31	477	C. F. Washburn	" " "Dirigo"	50 00
" 31	478	E. E. Bates	Blacksmith w0rk, paint	15 61
" 31	479	J. H. Smith	Pointing and sharpening tools	10 49
" 31	480	Charles C. Smith	Hay	117 98
" 31	481	H. Burrell & Co	Coal	50 00
" 31	482	Scott & Harrington	Hay, oats	6 72
" 31	483	Shuler & Rathburn	"	52 85
" 31	484	Manley & Smeeton	Steel, chain, scythe, repairs	21 49
" 31	485	King, Hamilton & Co	Lumber, steel, planing	8 33
" 31	486	Haeberlin Bros	Bolts, nails, auger, lock	6 63
" 31	487	J. N. Shuler	Lumber	69 18
" 31	488	William Stormont	Castings and foundry work	8 15
" 31	489	George Dralle	Oil, crockery	3 70
" 31	490	John G. Nattinger	Coal	18 41
" 31	491	John R. Cameron, P. M.	Postage stamps	27 00
" 31	492	C., R. I. & P. R. R	Freight	10 55
" 31	493	W. B. Titus	R. R. fare, drayage, blacksmithing	3 35
" 31	494	Western Cement Associa'n	Cement	183 82
" 31	495	J. S. Luther & Son	Lumber	7 50
" 31	496	B. F. Shaw	Expenses as commissioner, 3 mos	43 75
" 31	497	Martin Kingman	" " 2 "	9 90

Statement—Continued.

Date.	No. of vch'r	Name.	For what expended.	Amount.
1877. Sept. 30	499	William Thomas	Pay-roll for labor	$290 00
" 30	500	James M. Leighton	" "	802 51
" 30	501	Henry G. Eddy	" "	911 92
" 30	502	William Keough	" "	448 27
" 30	503	Almond Thomas	" "	793 00
" 30	504	W. B. Titus	" "	323 94
" 30	505	Scott B. Wilder	" "	352 57
" 30	506	James A. Watson	" "	363 68
" 30	507	Robert Morrison	" "	502 80
" 30	508	Western Union Tel'gh Co.	Telegrams during July & Aug. 1877	5 14
" 30	509	Atlantic & Pacific " "	" " Sept., 1877	3 82
" 30	510	Heald, Sisco & Co	One piston for mud pump	10 00
" 30	511	J. W. Thomas	Oak lumber	93 40
" 30	512	McArthur, Smith & Co	Lumber	52 50
" 30	513	Singer & Talcott, Stone & Co	Stone	1,700 00
" 30	514	Brackebush, Dickson & Co	Coal	190 54
" 30	515	Norton & Co	Lumber, rope, oil, brooms	53 12
" 30	516	George B. Martin	Lumber, coal, oats	426 84
" 30	517	C. H. Bacon & Co	Oil, lead, lamp chimneys	39 71
" 30	518	William Hanley	Liniment, glass, putty	10 15
" 30	519	Dr. W. Bradley	" stationery, oil	13 47
" 30	520	Boyer & Corneau	Cement, sand, stone	45 30
" 30	521	John Geddes	Tallow	10 60
" 30	522	Chicago & Alton R. R.	Freight	35 17
" 30	523	Joseph Duso	Use of boat "W. A. Steel"	180 00
" 30	524	John Parr	" " "Mary O'Rely"	80 00
" 30	525	Adam Funk	" " "Admiral"	47 00
" 30	526	John McCarthy	" " "W. J. Roebuck"	10 00
" 30	527	Estate of C. E. Ward	Windows, turning wheels, handles and spokes	22 76
" 30	528	P. J. Westberg	Brooms	5 35
" 30	529	J. H. Smith	Sharpening and pointing tools, blacksmithing	14 34
" 30	530	W. T. Ebersoll	Oats	16 00
" 30	531	John Nelson	Lumber	14 34
" 30	532	Shuler & Rathburn	Oats, hay	169 12
" 30	533	Manley & Smeeton	Nails, rope, hammer, iron	72 46
" 30	534	Forbes & Gehring	Oil, liniment, lead	11 08
" 30	535	Haeberlin Bros	Nails, level, iron, steel	14 64
" 30	536	J. N. Shuler	Lumber	31 05
" 30	537	John D. Vette	Repairs on wagons	17 40
" 30	538	W. B. Titus	R, R. fare, freight, blacksmithing	13 10
" 30	539	W. E Codding	" cement, telegraphing	6 10
" 30	540	Western Cement Associa'n	Cement	142 86
" 30	541	J. O. Glover	Expenses as Commissioner, 3 mo's	12 65
1877. Oct. 31	543	William Thomas	Pay roll for labor	290 00
" 31	544	James M. Leighton	" "	985 32
" 31	545	Henry G. Eddy	" "	900 14
" 31	546	William Keough	" "	524 14
" 31	547	Almond Thomas	" 's	755 15
" 31	548	W. B. Titus	" "	273 25
" 31	549	Scott R. Wilder	" "	376 63
" 31	550	James A. Watson	" "	345 14
" 31	551	Robert Morrison	" "	501 86
" 31	552	Western Union Teleg. Co.	Telegrams during September, 1877	10 71
" 31	553	Atlantic & Pacific Tel. Co.	" " October, "	7 00
" 31	554	Wells, French & Co.	Lumber and castings	1,149 47
" 31	555	Cragin Bros. & Chandler	Mantel, boiler, fixtures for house	100 21
" 31	556	McArthur; Smith & Co	Lumber, posts, shingles	11 15
" 31	557	John Alston & Co	Oil	19 79
" 31	558	A. C. Brackebush	Indiana block and hard coal	230 27
" 31	559	A. S. Piper & Co	Labor, iron, lumber, nails	28 89
" 31	560	Boyer & Corneau	Stone	36 00
" 31	561	J. S. Luther & Son	Lumber	20 70
" 31	562	Norton & Co	Hose, oil, lime, rope,	120 07
" 31	563	George B. Martin	Lumber, doors, windows, nails, oats, coal	468 84
" 31	564	D. C. Baldwin	Nails, iron, stucco, oil	29 09
" 31	565	Abe Rupley	Nails, iron, pipe, labor, bolts	136 10
" 31	566	Dr. W. Bradley	Repairing clock, stationery	6 98
" 31	567	Finch & Hopkins	Brooms	4 00
" 31	568	Julius Scheibe	Sand, stone, lime, brick	101 25
" 31	569	Samuel Wilson	Hay	6 21
" 31	570	Elisha Sly	Freight on boat "Dr. Hanley"	8 25
" 31	571	William Keough	Horseshoeing, railroad fare	95
" 31	572	Almond Thomas	Stove pipe, railroad fare, repairs to harness	7 50

Statement—Continued.

Date.	No. of vouchr	Name.	For what expended.	Amount.
1877. Oct. 31	573	Orange Thomas	Bolt, Coal	$5 20
" 31	574	Chicago & Alton R. R	Freight	3 04
" 31	575	Joseph Duso	Use of boat "W. A. Steel,"	200 00
" 31	576	John Parr	" " "Mary O'Rely,"	80 00
" 31	577	W. A. Steel	Stone	250 66
" 31	578	Mason, Plants & Co	Doors, stair, glass, labor	131 65
" 31	579	Thomas H. Patterson	Lime	31 00
" 31	580	Joliet Mound Co	Drain Tile	50 00
" 31	581	E. E. Bates	Nails, oil, paint, repairing tools	6 15
" 31	582	J. H. Smith	Pointing and " "	3 74
" 31	583	Osman & Hapeman	Wall-paper, printing, stationery	83 32
" 31	584	Shuler & Rathburn	Oats	33 15
" 31	585	John Leonard	Blacksmithing	49 40
" 31	586	John G. Nattinger	Coal	6 33
" 31	587	William Duckett	"	10 32
" 31	588	C. R. I. & P. R. R	Freight	5 67
" 31	589	W. B. Titus	Repairing stove, R. R. fare, postage	3 93
" 31	590	Western Cement Associa'n	Cement	60 29
" 31	591	Singer & Talcott Stone Co.	Stone	2,125 00
Nov. 30	595	William Thomas	Pay-roll for labor	290 00
" 30	596	James M. Leighton	" "	703 25
" 30	597	Henry G. Eddy	" "	672 02
" 30	598	William Keough	" "	442 56
" 30	599	Almond Thomas	" "	503 96
" 30	600	W. B. Titus	" "	362 14
" 30	601	Scott R. Wilder	" "	376 97
" 30	602	James A. Watson	" "	364 77
" 30	603	Robert Morrison	" "	140 93
" 30	604	Western Union Teleg. Co	Telegrams during October, 1877	16 59
" 30	605	Atlantic & Pacific "	" " November, 1877	13 29
" 30	606	Singer & Talcott Stone Co.	Use of scow, labor	16 75
" 30	607	Gilbert, Hubbard & Co	Gin wheels, wire rope	36 52
" 30	608	Owen Owens	Packing, gauge glass, repairs	16 13
" 30	609	S. D. Kimbark	One anvil, swages and flatters	42 64
" 30	610	William Cook	Freight, oats, labor	28 00
" 30	611	John Kelly	Plastering	12 00
" 30	612	J. W. Thomas	Oak lumber	91 89
" 30	613	Boyer & Corneau	Stone, use of boat	102 00
" 30	614	Norton & Co	Lumber, cement stabling, R. R. fare	224 28
" 30	615	George B. Martin	" oats, corn, paint, glass	396 69
" 30	616	C. H. Bacon & Co	Paint, oil, lantern	21 13
" 30	617	Abe Rupley	Nails, picks, shovels, rags, pipe	21 00
" 30	618	Chicago & Alton R. R	Freight	1 10
" 30	619	James M. Leighton	R. R. fare, lock, repairs on wagon	11 35
" 30	620	Henry G. Eddy	" " stabling	3 70
" 30	621	Almond Thomas	" " Hay	14 77
" 30	622	Isaac Nobes	Stone	330 06
" 30	623	Joseph Duso	Use of boat, "W. A. Steel"	105 00
" 30	624	John Parr	" " "Mary O'Rely"	60 00
" 30	625	A. J. Leith, Receiver	Iron	19 10
" 30	626	Brooks & Co	Stove, iron, pump, labor	127 51
" 30	627	Mason, Plants & Co	Lock, butts	3 40
" 30	628	H. Burrell & Co	Coal	18 40
" 30	629	James G. Scott	Lumber	11 20
" 30	630	Strawn & Powell	" sawing	4 48
" 30	631	Manley & Smeeton	Iron, locks, nails, bolts, pipe	14 69
" 30	632	Haberlin Bro's	" repairs, " " pails	21 75
" 30	633	John N. Shuler	Lumber, shingles	16 38
" 30	634	William Stomont	Castings and foundry work	7 14
" 30	635	S. P. Couch	Whips, repairs to harness and pumps	15 10
" 30	636	E. Y. Griggs	Glass, putty, paint, oil	9 11
" 30	637	John G. Nattinger	Blossburg coal	3 20
" 30	638	W. H. Hull	Toweling, thread	1 95
" 30	639	E. F. Bull	Legal services	288 10
" 30	640	C. B & Q R. R	Freight on oak lumber	43 68
" 30	641	W. B. Titus	R. R. fare, expressage, freight	14 87
" 30	642	Scott A. Wilder	" " pails, horse shoeing	2 70
" 30	643	W. E Codding	" " telegr'ms, weighing stone	6 95
" 30	644	H. S. Gilbert	Lumber	32 00
" 30	645	Lewis Cook	Repairing valve, chains, coal, lock	8 10
" 30	646	W. T. Matson	Telegrams, livery, stationery	4 86
" 30	647	Telegraph and Herald Co.	Printing letter h'ds, envelopes, vch'rs	15 25
" 30	648	J. O. Glover	Expenses as commissioner, 2 months	3 70
" 30	649	B F. Shaw	" " 3 "	34 25
" 30	650	Martin Kingman	" " 3 "	25 25
" 30	658	William Milne	Rent of post-office box	75
			Total	$97,971 29

"I."—*Receipts for Lockage at Henry.*

Date.	No. of rec'pt	Name of Collector.	Where Collected.	Amount.
1877. February 28	23	W. T. House	Henry	$23 55
March 31	28	W. T. House	Henry	864 74
April 30	35	Albert F. Dow	Chicago	37 45
" 30	39	W. T. House	Henry	928 75
May 31	45	Albert F. Dow	Chicago	303 72
" 31	46	William Milne	Lockport	1 42
" 31	47	W. E Codding	Ottawa	3 07
" 31	49	W. T. House	Henry	688 78
June 30	57	Albert F. Dow	Chicago	175 36
" 30	59	W. E. Codding	Ottawa	19 02
" 30	60	W. T. Mason	LaSalle	20 45
" 30	61	W T. House	Henry	724 41
July 31	70	Albert F. Dow	Chicago	178 66
" 31	72	W. E. Codding	Ottawa	1 25
" 31	74	W. T. House	Henry	427 97
August 31	82	Albert F. Dow	Chicago	210 96
" 31	84	W. E. Codding	Ottawa	2 78
" 31	86	W. T. House	Henry	374 29
September 30	90	Albert F. Dow	Chicago	147 09
" 30	92	W. E. Codding	Ottawa	11 74
" 30	93	W. T. Mason	LaSalle	4 22
" 30	94	W. T. House	Henry	347 14
October 31	101	Albert F. Dow	Chicago	78 46
" 31	103	W. E. Codding	Ottawa	1 86
" 31	104	W. T. House	Henry	232 97
November 30	117	Albert F. Dow	Chicago	48 29
" 30	119	W. E. Codding	Ottawa	7 05
" 30	120	W. T. House	Henry	196 64
		Total		$6,062 09

"J."—*Disbursements for Lockage at Henry.*

Date.	No. of vch'r	Name.	For what expended.	Amount.
1876. December 31	47	W. T. House	Salary as coll'r, excha'ge, dray'gc	$81 30
1877. January 31	102	"	" " ink	80 25
February 28	157	"	" " labor, blacksmit'g	91 48
March 31	208	John Alston & Co	Oil	10 15
" 31	210	W. T. House	Salary as collector, wood, excha'g assistance	84 90
" 31	211	William Duke	Salary as lock tender	35 00
" 31	212	Charles J. Sleater	" "	35 00
April 30	213	William Thomas	Pay-roll for labor	150 00
May 31	288	"	" "	150 00
June 30	346	"	" "	150 00
July 31	396	"	" "	140 00
August 31	447	"	" "	140 00
" 31	496	B. F. Shaw	Expenses as Commissioner	8 25
" 31	497	Martin Kingman	" "	1 00
September 30	499	William Thomas	Pay-roll for labor	140 00
" 30	541	J. O. Glover	Expenses as Commissioner	10 10
" 30	542	John Alston & Co	Oil	8 70
October 31	543	William Thomas	Pay-roll for labor	118 71
November 30	595	"	" "	110 00
" 30	654	W. T. House	Exch'e on remittan's, wood, labor	27 63
" 30	655	J. E. and F. A. Powell	Oil, paint, lamp chimneys, ink	10 65
" 30	656	C. Gould	Axe, oil can, nails, square, awl	16 80
" 30	657	J. C. Law	Lumber	5 15
			Total	$1,605 07

"K."—*Receipts for Lockage at Copperas Creek.*

Date.	No. of Recp.	Name of Collector.	Where Collected.	Amount.
1877. Oct. 31	101	Albert F. Dow	Chicago	64
" 31	104	W. T. House	Henry	$25 50
" 31	105	Isaac N. Munson	Copperas Creek	39 69
Nov. 30	117	Albert F. Dow	Chicago	1 37
" 30	120	W. T. House	Henry	63 00
" 30	121	Isaac N. Munson	Copperas Creek	283 77
		Total		$413 97

"L."—*Disbursements for Lockage at Copperas Creek.*

Date.	No. of Recp.	Name.	For what expended.	Amount.
1877. Oct. 31	543	William Thomas	Pay-roll for labor	$21 29
Nov. 30	595	" "	" "	150 00
" 30	658	William Milne	Expenses to Peoria	14 50
" 30	659	J. M. Terwilliger	One safe	175 00
" 30	660	J. T. Rogers & Co	Lumber ripping	15 83
" 30	661	Walker, Thompson & Co	Nails, wrench, hatchet, locks	5 98
" 30	662	Colburn, Birks & Co	Oil, tank, can	22 88
" 30	663	Charles Fisher & Co	Glass, oil, paint	2 75
" 30	664	Shelly & Son	Lanterns, reflector, wicks	5 50
" 30	665	McCoy & Straut	Grease	2 50
" 30	666	Z. N. Hotchkiss	Waste	2 60
" 30	667	Cutler, Sandmeyer & Co	Stove pipe	90
" 30	668	Adair & Utley	Letter book, brush, bowl	2 80
" 30	669	Kingman & Co	Expressage, freight, hauling safe	28 65
" 30	670	Sloan, Johnson & Co	Salt	1 30
" 30	671	J. L. Knowlton & Co	Boat hooks	1 00
		Total		$453 48

"M."—*Receipts and Disbursements on account of the Little Wabash River Improvement from December 1, 1876, to November 30, 1877, inclusive.*

Date.	No. of rec'pt or v'ch r	Name.	For what received or for what expended.		Amount.
			RECEIPTS.		
1877. Jan. 1	.....	.....	Rent of water-power to Jan. 1. 1877	$165 00	
Sept. 18	.....	.....	Rent of water-power to July 1. 1877	165 00	
					$330 00
			DISBURSEMENTS.		
1876. Dec. 2	1	W. P. Abshier	Removing drift	$25 88	
1877. Jan. 1	2	J. W. Lungtree	Building dyke or levee	208 40	234 28
					$95 72
			Repaid amount advanced by former Treasurer, as per report of Canal Comm's Dec. 1, 1876, page 27		18 03
			Balance on hand in hands of Treasurer		$77 69

APPENDIX.

List of Notes on Hand November 30, 1877.

Number of notes.	No. on note.	Amount of note.	Total of notes.	Total.
1—Sale in 1863. (Sale on 20 years' time, interest payable annually.)		$711 00	$711 00	
1—Sale in 1863. (Sale on 20 years' time, interest payable annually.)		252 00	252 00	$963 00
1—Sale in 1875	2	1,550 00	1,550 00	
1— " "	3	250 00	250 00	
1— " "	4	196 00	196 00	
1— " "	5	583 31	583 31	2,579 31
2— " 1876	7	400 00	800 00	800 00
Total				$4,342 31

Statement of number Canal Boats running; of Miles run; of Clearances issued, and of Tons transported on the Illinois and Michigan Canal during eighteen years, viz: from 1860 to 1877 inclusive.

Date.	Clearances issued	Boats running.	Miles run.	Tons transported
1860	3,926	201	235,684	367,437
1861	6,339	194	415,599	547,295
1862	7,044	211	474,976	673,590
1863	5,810	240	418,713	619,599
1864	4,527	228	300,340	510,286
1865	3,907	228	360,614	616,140
1866	5,488	230	406,784	746,815
1867	4,183	209	357,623	746,954
1868	4,128	218	345,169	737,827
1869	4,524	219	385,050	817,738
1870	2,903	179	242,650	585,870
1871	3,523	186	278,948	629,975
1872	*5,018	173	334,820	783,641
1873	*4,743	172	328,164	849,533
1874	*4,296	152	288,075	712,020
1875	*3,544	142	259,878	676,025
1876	*4,049	†145	302,024	691,943
1877	*4,008	†145	272,788	605,912

* Includes clearances at Henry and Copperas Creek.

† Of this number 23 are steam canal boats.

Exhibit from 1848 to 1877, inclusive.

Year.	Ordinary repairs.	Extraordinary repairs, renewals and hydraulic works.	Gross expenses.	Tolls.	Canal opened.	Canal closed.	No. of days open.
1848.....	$36,452	$6,744	$43,197	$87,890	April 19.....	Nov. 29.....	224
1849.....	43,922	26,999	70,922	118,375	April 20.....	Dec. 6.....	231
1850.....	38,418	19,996	58,415	125,504	March 22.....	Dec. 6.....	259
1851.....	39,447	19,027	58,475	173,300	March 15.....	Dec. 8.....	269
1852.....	42,816	10,692	33,508	168,577	March 29.....	Dec. 8.....	255
1853.....	40,383	4,486	44,870	173,372	March 14.....	Dec. 12.....	274
1854.....	36,587	16,654	53,242	198,326	March 15.....	Dec. 2.....	263
1855.....	38,216	32,657	70,873	180,519	April 3.....	Dec. 12.....	253
1856.....	33,101	58,357	91,458	184,310	April 8.....	Dec. 4.....	241
1857.....	37,256	65,825	103,082	197,830	May 1.....	Nov. 20.....	204
1858.....	36,115	21,972	58,088	197,171	April 1.....	Dec. 1.....	244
1859.....	34,026	40,406	74,432	132,140	March 16.....	Dec. 3.....	264
1860.....	34,308	48,275	82,583	138,554	March 8.....	Nov. 26.....	264
1861.....	39.238	15,823	55,061	218,040	March 4.....	Nov. 28.....	270
1862.....	40,024	15,337	55,362	264,657	April 1.....	Dec. 3.....	247
1863.....	48,294	13,021	62,715	210,386	March 4.....	Dec. 1.....	271
1864.....	47,535	18,572	66,107	156,607	March 10.....	Dec. 1.....	265
1865.....	39,255	85,614	124,869	300,810	April 10.....	Nov. 15.....	218
1866.....	43,716	72,647	116,363	302,958	April 11.....	Oct, 31.....	203
1867.....	46,152	116,504	162,656	252,231	April 10.....	Nov. 15.....	209
1868.....	52,984	69,067	122,052	215,720	April 4.....	Oct. 31.....	210
1869.....	49,514	42,251	91,765	238,759	April 7.....	Nov. 15.....	222
1870.....	43,098	65,597	108,695	149,635	April 7.....	Oct. 8.....	184
1871.....	54,555	42,667	97,222	159,050	April 6.....	Nov. 25.....	234
1872.....	42,785	46,090	88,876	165,874	April 1.....	Dec. 1.....	245
1873.....	*53,525	27,573	81,098	166,641	April 10.....	Nov. 20.....	225
1874.....	§49,139	24,659	73,798	144,831	March 30.....	Nov. 20.....	236
1875.....	‖46,241	28,270	74,511	107,081	April 15.....	Nov. 28.....	228
1876.....	†42,418	49,167	91,585	113,293	March 25.....	Nov. 18.....	239
1877.....	‡54,965	55,053	110,018	96,913	April 16.....	Dec. 1.....	230

NOTE.—The figures in the above table, from 1848 to May 1, 1871, are as given by the Trustees of the Illinois and Michigan Canal.

* In this amount is $15,400 paid collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs, $38,125.

§ In this amount is $15,399 paid collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to maintenance and repairs, $33,740.

‖ In this amount is $14,523 paid collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs, $31,718.

† In this amount is $12,757 paid collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs, $29,661.

‡ In this amount is $12,825 paid collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs, $42,140.

THE LEASES OF WATER POWER

Stand as they did at the last report, except that the lease of Dam No. 2, Joliet, was declared forfeited December 9, 1876, for non-payment of rent. This power has been temporarily rented since, no lease having as yet been made of it. The following is the schedule as they now stand:

Name of Lessee.	Description of Lease.	Time.	Date given or renewed.	Yearly Rent.	Payable.	Remarks.
Norton & Co	Lot 1, block 122, Lockport	20 years	March 4, 1873	$300 00	Semi-annually	Rent of lot 1 not included
Norton & Co	Lot 6, block 122, Lockport	20 "	May 1, 1873	200 00	"	Rent of lot 6 not included
Norton & Co	Surplus water at Lockport	20 "	July 1, 1866	2,177 00	"	Rent commenced July 1, 1872
G. W. Hyde	Dam No. 1, Joliet	20 "	July 17, 1876	1,220 00	"	Additional rent commenced July 1,'72
R. Sandiford	Dam No. 2, Joliet	Temporary	Dec. 9, 1876	300 00	Monthly, in advance	
S. D. Sprague	Dupage Dam	10 years	May 31, 1871	200 00	Semi-annually	
Ottawa Hydraulic Company	Ottawa	20 "	May 1, 1872	750 00	"	

"P."—*Unsold Canal Lots, November 30, 1877.*

Lots.	Block.	Valuation.	Total.
BRIDGEPORT.			
1,2,3,4,5,6,7,8,9	12	* $30,000 00	
	13	2,000 00	
Triangular lot (not numbered on plat)		1,000 00	
			$33,000
LOCKPORT.			
1,2	71	† $6,000 00	
4,5	102	‡ 2,575 00	
1,2,3	103	690 00	
3	114	80 00	
2	116	80 00	
5,6,7,8,9,10,11,12	121	2,400 00	
1,2,3,4,5,6	122	3,000 00	
1,2,3,4,5	123	1,425 00	
2,3,6,7	124	240 00	
1,2,3,4	125	200 00	
1,2,3,4	126	100 00	
2,3,6,7	127	200 00	
2,3,6,7	128	160 00	
1,2,3	129	30 00	
	131	10 00	
	134	25 00	
	135	40 00	
			$17,255 0
JOLIET.			
1,2,3,4,5,6,7,8,9,10,11	1	$110 00	
1,2,3,4,5,6,7,8,9,10	2	100 00	
4,5,6,7,8	3	100 00	
10	5	150 00	
11,12,13,14,15,16	37	2,000 00	
6	39	50 00	
	42	25 00	
1	43	200 00	
	44		
East part lot 5, Old Town, called "McKee Tract."	16	3,000 00	
			$5,735 00
DUPAGE.			
3	16	$10 00	
1,2	21	40 00	
..... (worth nothing—inundated)	51		
8,9 " " "	4		
			$50 00
KANKAKEE.			
	30		
	31		
	32		
	33		
	34		
	37		
	38		
	39		
	40		
	41		
	42		
Being in section 31, town 34, range 9, containing 16 32-100 acres, at $25		$408 00	
			$480 00

* This amount includes buildings, viz: Collector's office, lock-house, engineer's house, and hydraulic building.

† This amount includes buildings, viz: Canal office and house.

‡ This amount includes buildings, viz: State shop. barn, etc.

Statement—Continued.

Lots.	Block.	Valuation.	Total.
OTTAWA.			
.....,3,4,5,6,7,8.....	20	$10 00	
.....,3,4,5,6,7,8,9,10,11,12.....	21	4,000 00	
.....,3,4,5,6.....	22	600 00	
.....	23	600 00	
.....	24	300 00	
.....	25	500 00	
.....	26	500 00	
.....	27	400 00	
.....	28	50 00	
State's addition to Ottawa.....	43	200 00	
			$7,160 00
LASALLE.			
.....,7,12,13...	19	$170 00	
.....2.....	38	40 00	
.....	41	150 00	
.....,7,10,11,12,13.....	45	295 00	
.....,13,14.....	101	100 00	
.....,7.....	124	40 00	
.....(except right of way).....	126	75 00	
.....,3,5, (except right of way).....	127	185 00	
.....,10,11.....	127	400 00	
.....0,11.....	131	900 00	
.....,4,5,6,7,8,9,10.....	137	2,220 00	
.....,3.....	141	1,200 00	
.....,3.....	142	750 00	
			$6,525 00
WINNEBAGO.			
.....,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,.....	48	$400 00	$400 00

Unsold Canal Lands, November 30, 1877.

Description.	Secti'n.	Town	Range.	Acres	Valuation per acre.	Valuati'n of tract.
.....st point of island, middle fraction sw fractional quarter.....	11	33	3	3.50	$1 00	$3 50
.....uction south of canal, e hf nw¼.....	17	33	3	.72	1 00	72
.....ree small islands.....	15	33	4	.....	.....	5 00
.....t of island in n hf.....	17	33	4	.....	.....	5 00
.....nd in section	19	33	5	52.44	6 00	314 64
.....nd in section	1	33	7	13.09	1 00	13 09
.....rth fr of sw fr qr, and n fr se fr qr.....	9	33	9	47.43	35 00	1,185 75
.....st part s fr se fr qr.....	35	35	9	22.45	8 00	179 60
.....st fr of se fr qr.....	11	38	12	4.60	10 00	46 00
Total	.....	.....	.....	.....	.....	$1,753 30

Recapitulation.

	Valuation.	Total.
Unsold lots—Bridgeport, 11	$33,000 00	
" Lockport, 54	17,255 00	
" Joliet, 38	5,735 00	
" DuPage, 6	50 00	
" Kankakee, 11	408 00	
" Ottawa, 33	7,160 00	
" LaSalle, 49	6,525 00	
" Winnebago, 17	400 00	$70,533 00
Unsold lands		1,753 30
Total		$72,286 30

" Q."—*Statement of articles cleared, Illinois and Michigan Canal and locks at Henry and Copperas Creek, for the year ending November 30, 1877.*

Articles.		Canal.	Lock at Henry.	Lock at Copperas Creek.
Flour	Barrels.	90,035	25	2,228
Lime, common	"	411		113
Lime, hydraulic	"	938		
Oil	"	300	6	
Salt	"	19,152	124	386
Barley	Bushels.	1,090	200	
Corn	"	4,118,828	696,725	
Oats	"	1,090,035	78,664	
Potatoes	"	499	315	
Rye	"	66,086	55,000	18,400
Wheat	"	575,786	1,444	2,050
Agricultural implements	Pounds.	8,990		
Butter	"	19,911		
Carpenters and joiners work	"	59,913		
Coal, mineral	"	32,447,390	16,672,000	470,000
Drain pipe	"	651,555	32,000	
Eggs	"	3,281		
Empty barrels	"	1,226,320	14,840	165,660
Furniture, household	"	73,109		
Hay and fodder	"	8,822		
Iron, all kinds	"	633,741	2,195,000	10,000
Iron ore	"	356,180		
Ice	"	59,194,000	105,390,000	780,000
Merchandise, including dry goods groceries, hardware, cutlery, crockery and glassware	"	1,049,969	218,061	1,454,816
Meal	"	6,980,277		
Machinery	"	81,710		
Nails and spikes	"	65,100		
Sand and other earths	"	16,055,400	3,224,995	
Staves and headings	"	1,659,000		
Seeds	"	1,962,551		21,400
Wagons and other vehicles	"	43,330	1,000	9,000
All other articles not enumerated	"	2,107,927	223,500	6,000
Brick	Number.	359,500		
Lath	"	5,429,070		
Shingles	"	22,970,750		6,000
Posts and rails	"	127,067		
Lumber, B. M	Feet.	48,253,520	100,000	20,500
Siding	"	228,892		
Flooring	"	143,633		
Stone	Cubic yards.	132,515		
Tanners bark	Cords.	121	148	
Wood	"	593		
Passengers	Number.			131
Boats	Miles.	254,608	18,180	

Commissioners.

Joseph Utley	Dixon, Illinois	Time expired May 22, 1877
W. N. Brainard	Chicago, "	" " "
H. G. Anderson	Peoria, "	" " "
J. O. Glover	Chicago, "	Time commenced May 22, 1877
B. F. Shaw	Dixon, "	" " "
Martin Kingman	Peoria, "	" " "

List of Officers and Agents employed by the Board of Canal Commissioners in 1877.

Name.	Occupation.	Compensation.	Remarks.
Daniel C. Jenne	Chief Engineer	$4,000 00	Per annum
William Thomas	General Superintendent	3,000 00	"
William Milne	Clerk in general office	1,020 00	"
S. A. Anderson	Clerk in Treasurer's office	600 00	" Services ceased May 31, 1877
Charles Levings	Assistant Engineer at Copperas Creek	1,800 00	"
Robert Ross	Inspector of Masonry at Copperas Creek	1,200 00	" Employed less than 1½ months during last year.
Albert F. Dow	Collector of tolls at Chicago	1,400 00	Per annum, and rent of engineer's house at Bridgeport
William Milne	" " Lockport	960 00	"
W. E. Codding	" " Ottawa	960 00	"
W. T. Mason	" " LaSalle	960 00	" Services ceased Sept. 10, 1877
W. T. House	" " Henry	960 00	"
Isaac N. Munson	" " Copperas Creek	960 00	" Services commenced Oct. 28, 1877.
William Cook	Inspector of boats at Chicago	50 00	Per month — During season of navigation with rent of old lock house

RATES OF TOLL

Established upon the Illinois and Michigan Canal, and the Lock at Henry, in the Illinois River, by resolution of the Board of Canal Commissioners, passed 21st of June, 1877.

On freight boats, per mile on the canal..... 3½ cents.
On the following articles, per 1,000 lbs. per mile, and in the same proportion for a greater or lesser weight, the rates of toll and lockage at Henry, are as follows:
Lockage at Henry, freight boats..... 1½ cents per ton measurement.
" " *steamboats..... 1½ " " " "
" " ice boats..... 1½ " " " "
"Through freight" is that which is cleared from Henry to Chicago; or Chicago to Henry. "Local freight" includes all other freight.

Articles.	Through Freight.	Local Freight.	Lockage.
	Tolls in mills.	Tolls in mills.	Lockage in cents.
Beans	2	2	3
Barley	2	2	3
Buckwheat	2	2	3
Bran	2	2	3
Bark, tanners'..	1	1	1½
Barrels, empty..	2	2	3
Cotton, raw in bales	1	1	3
Corn	2	2	3
Charcoal..	1	2	1
Coal, per ton, per mile	1	1	3
Coke	1	2	3
Clay	½	½	3
Drainage pipe	1	1	3
*Flour	2	2	3
Furniture, household	2	2	3
Hay and fodder	2	2	3
Hemp	2	2	3
Hoops, and materials for	2	2	3
Hubs, boat knees and bolts	2	2	3
Iron, pig and scrap	¾	¾	2
Iron, railroad	¾	¾	2
Iron, wrought and cast	2	2	3
Ice	1	1½	1½
Iron ore	¾	¾	2
Lime, common	1	1	2
Lime, hydraulic	1	1	2
Lead, pipe, sheet and roll	1½	2	3
Lead, pigs and bars	1½	2	3
Land plaster, bone dust, and super phosphate	1	1	1
Merchandise, (including hardware, dry goods, cutlery, groceries, crockery, and all other articles not specified)	2	2	3
Meal	2	2	3
Machinery	2	2	3
Oats	2	2	3
Rye	2	2	3
Salt, in sacks or barrels	1	1½	2
Seeds	2	2	3
Shorts and screenings	2	2	3
Shipstuff	2	2	3
Staves and heading	2	2	3
Sand and other earth	½	½	1
Wheat	2	2	3
Zinc, spelter	2	2	3
Passengers			5

Rates of Toll—Continued.

Articles.		Through Freight. Tolls in mills.	Local Freight. Tolls in mills.	Lockage. Lockage in cents.
On the following articles toll per mile will be computed by number or measure.				
*On each 1,000 feet of lumber	Per mile	5	5	5
On each 1,000 feet of dressed flooring	"	4	4	5
On each 1,000 feet of siding	"	2	2	2½
On each 1,000 lath	"	1	1	1¼
On each 1,000 brick	"	3	3	5
On each 100 split posts or fence rails	"	4	4	5
On each 1,000 shingles	"	½	½	1
On each 100 R. R. ties	"	8	8	8
*On each cord of wood for fuel	"	8	10	8
*On each cubic yard (27 c. ft.) dressed or sawed stone	"	7	10	10
" " " rubble stone	"	4	5	15
" " " dimension stone	"	6	8	15
" " " McAdam stone	"	3	4	9

* No steamboat to be rated at over 500 tons.

Provided that on stone transported over 30 miles the tolls shall not exceed 15 cents per cubic yard on McAdam or rubble, and 25 cents per cubic yard on dimension and dressed or sawed stone.

* Provided that on wood transported over 40 miles the tolls shall not exceed 40 cents per cord. All timber on boats shall be taken board measure.

* Provided that on lumber transported, 90,000 feet shall be a canal boat load, and 75,000 feet a propeller load—all over that free of toll. Flooring, siding and shingles shall be figured upon the same basis.

The weight of a box, bag, crate, vessel or thing in which any article may be contained, shall be added to the weight of the article itself, and toll computed accordingly.

* Four sacks to be figured as one barrel.

The toll on stone, shipped from any point on the canal, through the Henry lock, will be figured at through rates.

Duplicate bills of lading required in all cases, one to be deposited with the Collector to whom toll is paid.

N. B.—The attention of all masters and shippers is hereby directed to the following sections of the Rules, By-Laws and Regulations of the Illinois and Michigan Canal, to-wit: Sections 55 to 63, inclusive; and the rules established for the lockage of boats at Henry.

The lockage rates at Copperas Creek were fixed by resolution of the Board October 26, 1877, the same as at Henry; provided, that any boat having passed either lock and paid lockage, shall be entitled to pass the other lock free, on that passage (up or down,) this to apply only to the boat, the cargo to be charged lockage at both locks, as per toll sheet. Also, that the rate for passengers be fixed at 5 cents for each lock.

* By resolution of the Board of October 11, 1877, the "through" rate on lumber was made four mills and no lockage for the rest of the season of 1877.

B. F. SHAW, *Secretary*.

REPORT OF SUPERINTENDENT.

SUPERINTENDENT'S OFFICE,
ILLINOIS AND MICHIGAN CANAL,
LOCKPORT, ILL., December 1, 1877.

To the Honorable Board of Canal Commissioners:

GENTLEMEN.—In compliance with the directions of your Board, I herewith submit the following report, relative to the maintenance and repairs of the Illinois and Michigan Canal, during the year ending November 30, 1877.

At the close of the year ending November 30, 1876, as will be seen by reference to the report of the Board of Canal Commissioners for that year, the repairs of two important structures had been commenced. I refer to the trunk of the Kankakee aqueduct and rebuilding lock No. 9 at Marseilles. The materials for the trunk of the aqueduct had all been procured, framed and delivered on the ground, ready to put in place as soon as the water was drawn off and the old structure removed. This work was prosecuted vigorously and completed about the middle of January, 1877, at a cost of $2,146.51, to which add the expenses in 1876 of $9,101.41, making the total cost $11,247.92. The stone for the lock had all been delivered in the rough, but were not all paid for. This work made good progress, and was completed about the 1st of April at a cost of $7,940.68, to which add expenses of last year of $4,067.35, making in the aggregate $12,008.03, from which deduct $1,000 the cost of derricks, and tools included in last years' expenses and not properly chargeable to this work, leaving total cost $11,008.03.

Owing to the large accumulation by deposit of mud, sand and other material, at different points on the main line of canal, I was compelled to organize, during the suspension of navigation, a number of gangs of men, and remove the same with wheelbarrows and shovels, at places most obstructed, and this for lack of the necessary dredges to perform the work during navigation, which is by far the cheaper way of doing the work. The places where the most work was required, were at points remote from towns, and in order to board and keep the men, I located three repair boats at these places before drawing off the water. This work was prosecuted during the entire winter with quite favorable results, but with large expense.

The masonry in the abutments and piers of the Fox river aqueduct, has for several years given evidence of decay, and it was found that important repairs must be made or, the structure would fail. After the water was drawn off in 1876, a careful examination showed that the masonry in the abutments must be repaired, as the face stone had become so much decayed as to fall to pieces. The work of taking

down the face stone and rebuilding the same with new stone, was immediately commenced and prosecuted with energy, when the weather would permit. Great care was taken to have these face stone well bonded with the old backing, in order to make substantial work. The total cost was $5,220.93.

At the Walbridge culvert 48 feet of the old wooden arch (put in there hastily during the season of navigation in April, 1865,) was taken up and a substantial stone arch built in its place, under the center of prism of canal, the balance of the old culvert being left in, as it was in fair condition. The cost of this work, including the excavation and refilling, was $1,080.72.

The lock house at lock No. 13, between Utica and LaSalle, was burned down in the early part of the winter and rebuilt at a cost of $535.12, in time for the opening of navigation. At the breaking up of the rivers in the vicinity of the canal, about the first of April last, heavy damage occurred to the canal, and Fox river feeder; at the dam at Dayton for the Fox river feeder, the river raised so high as to run over a guard-bank, above the east abutment and cut out a large channel in the rear of said abutment, also damaging the rear of the tow-path of feeder for some distance below the dam. The breach in rear of abutment was repaired by taking out the old abutment and building a new one 127 feet farther east at the foot of the high land, and extending the dam the same distance, making the total length of dam 600 feet, thus giving 127 feet increased water-way, which will prevent so high a rise over the dam again. The tow-path has been repaired by building a heavy slope wall, and all is now in such shape that I feel safe in saying that very few repairs will be required at Dayton for many years. The cost of this work was $3,334.85.

With the difficulty at Dayton, our trouble had only commenced. The Desplaines river, from Lemont to Summit, was raised to a higher point than ever before known. This was caused by parties interested in the Ogden-Wentworth ditch, who had built a dyke about six feet high across the valley of the Desplaines river east of the Summit, leaving only a space of 20 feet, where an open bulk-head had been built across said ditch and used as a bridge. In this way the overflow in a high stage of water towards Chicago river, was stopped, except what passed through this bulk-head, thus forcing a large part of the volume of water in the river south, towards Lemont, along the protection bank of the Illinois and Michigan Canal, from Summit to Lemont, causing an overflow and break of this bank in five or six different places. At Willow Springs and Mount Forrest the breaks into the canal were very serious, each being from one to three hundred feet in width, and in some places the full depth of canal. The one at Mount Forrest being entirely in quicksand, became so wide and deep that it discharged a very large portion of the river into the canal, and raised the water in the same ten feet at that point, and filled the prism of the canal with sand and other material.

The opening of navigation to Chicago was delayed by this cause from the 11th to the 16th of April. The work of repairing the banks and cleaning out the channel, was immediately commenced and prosecuted with all the forces that could be brought to bear upon it, and the whole work was completed at a cost of $9,992.00. The dam at Channahon, across the DuPage river, 150 feet in length and 11 feet

high, has been rebuilt with dimension stone in a very substantial manner, at a cost of $3,207.24.

The nose or upper end of the piers of the Fox river aqueduct had become so much decayed, and crumbled to pieces, as to require immediate attention. They were originally built in a semi-circular form, with a batter of one inch to the foot, and in their disintegrated condition, the ice in the river coming down and striking them, broke them to pieces and forced the stone out. Six of the seven piers have been repaired by extending the wall ten feet up the river in V form, on a batter of five inches to the foot, with heavy dimension stone, well bound into the old wall, thus forming a substantial ice breaker. This part of the work, as I believe, has been placed in a safe condition at a cost of $5,404.69.

Lock No. 10 at Marseilles had been in a very doubtful condition for several years, and could not safely be relied upon any longer. By the orders of your honorable Board this work was commenced in July last by contracting the quarrying and cutting of the face stone, and all of the face and backing were delivered on the ground before the close of navigation. The total expenses to date for this work are $5,965.44. The work of removing the old lock and building the new one, will be prosecuted this winter as fast as the weather will permit.

The trunk of the Nettle Creek aqueduct at the city of Morris had so far failed as to require rebuilding, and the material was provided, framed, and delivered on the ground before the close of navigation, and is now being raised. The cost up to this date is $694.04.

A new bridge has been built over the canal at Lemont, 86 feet span, at a cost of $494.50. The tow-path bridge over the DuPage River at Channahon, consisting of two spans, one 98, and the other 76 feet, has been rebuilt at a cost of $1,000.50. The tow-path bridge at Rock Run, 133 feet long, has been rebuilt of oak timber, at a cost of $678.53. The materials for a bridge over the canal at Aux Sable and one mile east of Morris, have been provided and delivered on the ground ready to raise, at a cost of $437 each.

The culvert one mile east of Aux Sable lock has been faced in the arch with 12x12 inch timber in a substantial manner. The lining of the Kickapoo culvert has been extended at each end so that it is now in a safe condition.

Two new flat boats have been added to the dredging machinery. A new frame for the steam crane and a new swing chain have been provided. The dredge has been kept in operation during the entire season. After getting through with the breaks between Summit and Lemont, it was removed to the Lockport end of the Summit level, where it has been in constant operation on that level and the one below the lock, removing about 400 cubic yards per day of the deposit which comes into the canal, through the Ogden-Wentworth ditch from Mud Lake. Not less than 40,000 cubic yards of this material has been removed from the canal at Lockport this season; and still there is another season's work for the dredge of the same material now in the canal at this point, beside a steady increase from the same quarter. I would respectfully call your attention to this abominable outrage committed upon the public property. The sum of $75,000 will not now make the State good, for the damage done to the Illinois and Michigan canal by this nuisance, and the damage to the canal must

continue as long as that ditch remains open, and in fact it will grow worse every year until it is closed. The authorities of the city of Chicago, or some other parties, have constructed a dam across this ditch, the past season, which is two feet lower than the natural banks of the river, and there is now six inches of water flowing over it. The dam is about 50 feet long, and the water which passes over it runs rapidly down through a narrow channel, taking with it the soft vegetable mould or mud of this swamp land, and deposits large portions of it in the canal at Lockport, amounting to half an inch every 24 hours during a considerable portion of the year. In some places where I had dredged last year and left eight feet of water, we found less than four feet when we commenced dredging this season. The cost of dredging at the Lockport end of the Summit level, and in the first level below, has been $6,483.94, making a grand total of expense for this year, chargeable to the Ogden-Wentworth ditch of $16,475.94.

The deposits from this ditch do not all stop at the Lockport end of the Summit level; the next level below is so filled up that it is difficult for boats to meet and pass. In the upper part of the canal above dam No. 1, at Joliet, and in the channel of the canal in front of the penitentiary dock, it is so filled up that loaded boats cannot land. In this part of the canal, where the water used to be 11 feet deep, it is not now over three feet, and for two miles below Joliet heavy deposits are being made.

I have been calling the attention of the Canal Commissioners, the mayor, common council, and their chief engineer, the board of public works, and the board of health of the city of Chicago, to this diversion of the Desplaines river through this ditch, for a long time. They have all visited the same, at different times, as also did the late Wm. B. Ogden, and inspected its workings, and without one dissenting opinion agreed that these views of the effect and operations of this ditch were correct, and that it should and must be closed.

The building of a low dam across the head of the ditch this season has not helped the matter, so far as the canal or city of Chicago are concerned; and unless the ditch is entirely closed, it would have been better to have left it in its former condition. The first high water will cut around this dam; the rent will be made worse than before, and an increased quantity of material plowed out, and sent forward to the canal.

It will be seen by the foregoing that the expenses for maintenance and repairs the past year, have necessarily been quite large. The ordinary repairs have been increased somewhat by the extra work done last winter, and the extraordinary repairs have increased the expenses very materially. Classified, they are as follows:

Extraordinary repairs	$55,053 69
Ordinary repairs	42,139 80
Salaries of collectors, lock-tenders, inspector, clerks, and incidentals not properly chargeable to superintendent's department	12,824 95
Total	$110,018 44

The expenses for the year 1878, will, from necessity, be large. The expense of the completion of Lock No. 10, at Marseilles, will have to be paid. The materials for the trunks of three important aqueducts, on the main line of the canal, known as the Aux Sable, Fox River and Vermillion, 16 spans in all, must be provided for, and will cost not less than $2,000 per span, or $32,000. The nose of the seventh pier of the

Fox River Aqueduct not done this year, will have to be built; the masonry under the trunk of all the seven piers will have to be repaired before the new superstructure is put on next winter, by taking down about four feet of the top, and rebuilding the same with large stone, in such a manner that the face of the wall below can be rebuilt afterwards when necessary. This masonry will cost about $5,000. Some considerable repairs will have to be made to the masonry of the Aux Sable Aqueduct. Several new bridges will have to be built during the season, and several lockgates will have to be renewed. Two new repair boats will have to be built; another dredge must be provided, with all the flat-boats and crane to work the same, adding quite largely to the expenses of the year.

There is a much better prospect for business on the canal for the next season, as there is an abundant crop of corn and oats, in the canal counties, of the past harvest to go forward, and if we would invite it on to the canal we must provide a good, navigable channel, with sufficient depth and width of water for boats drawing $4\frac{2}{3}$ feet, so that they can meet and pass without dragging on the bottom or sides.

I understand that several new steamboats are to be built for the canal trade the coming winter; and with the present outlook, and the assurance of a fair chance, it is quite certain that the canal trade will revive.

There are some other matters that I wish to call to your attention. I am credibly informed that a very unjust discrimination is being practiced in the city of Chicago, by the elevators, against the grain dealers along the canal, and to sucn an extent that it is depriving the canal of a large portion of its revenues. Several of the heavier shippers on the canal have been looking for a site in Chicago to erect an exclusively canal elevator. If this project should go into effect, as at present seems to be probable, I would respectfully recommend that your Honorable Board will grant them the use of that portion of the "90 feet strip" on the tow-path side of the canal, at the extreme end of the tow-path at Bridgeport. This is the most favorable site, as it has the river on two sides, and will give the canal dealers a good opportunity for doing business.

They now have to suffer the injustice of State inspection, which, if it does nothing else, robs the canal of its revenues. The canal lost not less than $10,000 last season through its operations, and I fail to see or understand who has been benefited thereby, or the wisdom or justice in having a system of grain inspection in Chicago, which does not apply to all parts of the State.

The stopping and transferring of grain to railroads in Joliet takes out about one half the tolls, and State inspection, at some seasons of navigation, stops one-half of the grain shipped on the canal, at this point.

It does not prevent it from going forward to market, but keeps it out of Chicago, and deprives the State of the tolls.

I call your attention to this subject in the hope that you may investigate the matter, and, if possible, avoid a repetition of the scenes and operations of last April and May.

All of which is respectfully submitted.

WM. THOMAS,
General Superintendent.

REPORT OF CHIEF ENGINEER.

CHIEF ENGINEER'S OFFICE,
CANTON, December 18th, 1877.

To the Hon. Board of Canal Commissioners:

GENTLEMEN:—In compliance with your directions, I have the honor to present the final report on the construction of the lock and dam at Copperas creek, for the improvement of the Illinois river.

REPORT.

Since the last annual report all the work has been successfully completed and has been in use from the 23d of October last, and fulfils every expectation. This makes 90 miles of completed navigation with 7 feet depth of water at all seasons of the year when the river is open.

The work progressed very well in December and January last, but after that time the water in the river was so high that but very little work was done until the latter part of July, excepting boating loose stone and framing timber for the dam. Commenced building the dam on the 14th of August by putting in the crib inside of the cofferdam next to west abutment of dam. The dredges commenced work on channel for dam on the 18th, and the first crib was sunk on the 25th of August. From that time the work on dam made fair progress, although the water was from 9 inches to 2 feet above low water, during all the time the dam was being built which made the work very difficult to perform. In order to expedite the same, I raised the top of the apron 6 inches, which makes it that much above low water, and this probably was the means of getting the same completed this year, and will result in no injury to the structure.

Some delay was occasioned by the dredges not making the channel wide enough the first time, and not returning as soon as necessary, but on the whole the progress was as good as circumstances would warrant, and the dam was closed at 3 P. M. on Sunday the 21st of October, and the water run over the same at 10 P. M. of the 22d. If it had not been closed that day, the probability is that it could not have been finished this year, as the water in the river was rising rapidly at the time and has continued to rise most of the time since.

A channel 50 feet wide had been cut through the excavation at head of lock by hand to within $1\frac{1}{2}$ feet of bottom before the dam was raised, which enabled us to draw water through the lock for several days before the dam was closed, and a channel had been cut through the excavation at foot with the dredge, some 60 feet wide. This enables us to pass boats through the lock as soon as the water run over the

dam, or on the 23d of October, and some light draught boats were locked through 2 or 3 days before.

At my request your board gave notice in the public prints in Peoria and St. Louis that navigation would be suspended at the lock and dam at Copperas creek after the first day of October from two to four weeks until the dam was finished. The actual suspension was about three weeks.

I would here say that the St. Louis and Peoria Packet had not made a trip for several weeks before the navigation was closed, as I suppose on account of the low stage of water from September 15th to October 10th.

On the 23d of October there were some 12,000 to 14,000 cubic yards of earth to be excavated at the head and foot of lock to complete the approaches into the same, which has since been taken out with dredges, and so much of the earth above the lock was deposited on and above the dam to complete the necessary filling at that point to make the dam secure.

The guard bank across Spring Lake on the east side of river progressed during the latter part of the summer, and was all finished except a gap of about 25 feet, which was left for the water of the lake to pass out. A few days before the dam was closed this gap was filled and successfully completed before the water raised above. This guard bank will probably require some repairs in the spring, as the water passes over the top during high water, and it will settle more or less, until it gets permanently solid, and hence will require some gravel and loose stone placed upon the top to make it of uniform height and permanently secure. Some 300 cubic yards of loose stone were left over by the contractor, which will come very convenient for the repairs of this bank and can be paid for as used.

In the appropriation of land for the guard bank I have included 2.87 acres of the east bluff, for the purpose of obtaining gravel and other materials for the repairs of this bank, which can be handily loaded on a boat on the upper side and taken to the place required on the bank.

Your board at my suggestion have purchased of the contractor a flat boat 14 by 50 feet, with 33 inch sides, for the purpose of being used in the repairs of this bank. This boat should be kept in the lake to be used in case of an emergency, or for any purpose. About 40 cubic yards of earth or 30 cubic yards of loose stone can be handled on it at a trip.

A description of all the different parts of the work was embraced in the last annual report to which you are respectfully referred, and it is not necessary to reiterate the same in this report. All the work has been completed in accordance with that description, with the exception, that the top of dam is 6¼ feet above low water, the filling above the dam is 45 feet in width, and the brush and stone upon it is extended 20 feet below the crib work across the river, but at the abutments it is extended from 30 to 40 feet, and four clusters of piles 30 feet long have been driven above the upper pier head extending up about 70 feet, to prevent boats being carried around the pier towards the dam by the strong current in high water.

After it was supposed that the dredging above and below the lock was completed and the dredges had left, I made an examination and

found some earth, logs and stone in the channel from one to two feet above bottom. The dredges had gone into winter quarters, and the work could not be done until spring I have therefore deducted from the excavation in the final account of A. McArthur 1470.6 cubic yards, amounting at 17 cents, the contract price, to $250. This amount Mr. McArthur has retained from H. S. Brown & Co., the owners of the dredges, and the same should be paid to them (H. S. Brown & Co.) after this work shall have been done to the satisfaction of Isaac N. Munson, Esq., the collector of tolls at the lock, to whom I have explained what is required. It cannot cost the owners of the dredges over $100 to do the work, but I have retained the above amount as a guarantee that the work will be done.

The right of way for the approach to dam and the guard bank on the east side of river, in Tazewell county, has not been obtained, but is in the court for condemnation. The expenses of same will have to be paid from the appropriation. I am of the opinion that there are funds enough left to pay for the dredging above referred to, and the expenses of condemnation of land. The amount on hand will be $723 99 after all other payments are made.

The description of the land required as above is as follows:

Beginning at a point in the east abutment to dam, which is 20 feet north of comb or fall of dam, thence running due east on the center line of section number four (4), township twenty-three (23), north range seven (7) west of third (3d) principal meridian, 200 feet, including a strip of land 250 feet wide on each side of said center, thence due east on said section center, line 724 feet to the west of line of section number three (3) in said above described township, including a strip of land 50 feet wide on both sides of said center line, being 3.96 acres of land in said section No. 4; thence due east on the center line of section number three (3) in said township 3,176 feet to a point 540 feet east of center of section; thence south 45 degrees, east 2,675 feet to the west line of section number two (2) in said township, including a strip of land 50 feet wide on each side of center line, being 3.65 acres in the north half of section No. 3, and 9.78 acres in the south half of section No. 3; thence south 45 degrees, east 1,120 feet to the southeast shore of Second Lake, including a strip of land 50 feet wide on each side of said center line, containing 2.57 acres in the southwest quarter of section No. 2, in said township.

Also, a piece of land described as follows: Beginning at a point 744 feet east of the southwest corner of section No. 2, thence east 500 feet, thence north about 500 feet to the foot of bluff and edge of Second Lake, thence southwesterly along southeast edge of Second Lake to the place of beginning, containing 2.87 acres in southwest quarter of section No. 2, be the same more or less.

The whole quantity of land will be as follows:

	Acres.
In section No. 4	3.96
In section No. 3, north half	3.65
In section No. 3, south half	9.78
In section No. 2, southwest quarter	2.57
In section No. 2, southwest quarter	2.87
Total	22.83

In section No. 3, 2.06 acres are in Spring Lake.
In section No. 2, 0.64 acres are in Second Lake.

The present contractor, Archibald McArthur, Esq., to whom the contract was assigned July 17th, 1875, by Willard Johnson, and his brothers William and James, under the firm of McArthur Brothers, have had to work under very serious embarrassments from almost the time they took possession, as may be seen from an examination of the annexed water gauges. At the date of the assignment water in the river stood at 3.5 feet above low water, but on the last day of that month it was 7 feet and rising rapidly, so that the lock-pit had to be filled, and it run up to 12 feet, and then receded again, and we were enabled to pump out the pit in September.

During the time since that date the river has not been down to low water mark. Only in the last of September and the first days of October, 1877, has the water been below one foot. Under all these discouraging circumstances the contractors have improved all the time with energy, when there was opportunity to work, and they are deserving of great credit for driving the work to completion this year.

It has been much more expensive to perform the work under such circumstances, for, when getting their forces organized for a vigorous prosecution of the work, by a sudden rise in the river they would have to stop, and their men would leave, and then again reorganize when the river got to a stage that they could work. The unhealthy location has been very disastrous in disorganizing their men; yet they have never complained or refused to perform the work according to the requirements of the contract and the directions of this department, and in no case have they ever asked for any leniency from a strict construction of the contract and specifications.

The contract is now settled up to the entire satisfaction of all parties. I would state here that on the first day of December the work was not all completed, but there was so little to be done I considered it best to wait a few days, embrace the whole final completion, and close it all up in this report, which accounts for the date.

Spring Lake Canal or Outlet to the Illinois River.

In the last report it was recommended to excavate a canal from the Illinois River to Spring Lake, to enable boats to pass into the upper part of the lake, after the guard bank from the dam to the east bluff was built across the lake. The Commissioners did not feel authorized to construct this canal, and on their recommendation the last General Assembly passed the following act:

"Section 1. *Be it enacted by the People of the State of Illinois represented in the General Assembly*, That the sum of six thousand two hundred dollars ($6,200) from the net revenues of the Illinois and Michifian Canal of the year 1877, or as much thereof as may be necessary, shall be, and the same is hereby appropriated, to be expended by the Canal Commissioners in opening an outlet from Spring Lake to the Illinois River above the lock and dam at Copperas Creek, in such manner as will afford a safe and convenient passage for canal boats, or other water craft of like size, to and from said lake into the Illinois River."

Approved May 17, 1877.

On the 10th day of August your Board advertised for proposals to be received on the 21st of August for the construction of said canal, and on the 24th of the month the work was awarded to Gordis R. Cobleigh and James M. Buchanan, of Pekin, and contract made.

The work was immediately commenced, progressed well, and was finished and settled up on the 26th day of October. The cost at contract prices amounted to $3,955.55 to which add $527.30 for engineering, and $102.75 for contingent expenses, making the total $4,585.40, to which will be added the cost of condemning the land appropriated for the same.

The canal is 4,900 feet long, 28 feet wide on the bottom, with side slopes 2 to 1 for the first 1,300 feet from the river, and 1½ to 1 for the balance of distance. The location was changed from a point just above, to a point about five miles above the lock and dam at Copperas Creek, and passes through the north half of sections No. 13 and 24 in township 24 north, range 7 west of 3d principal meridian, entering a slough that sets back from Spring Lake. The bottom of canal is two feet three inches below top of dam at Copperas Creek, and will have 2½ feet depth of water at the lowest water mark. Light draft boats can pass into the lake in any stage of water, which they could not do from the outlet of the lake. When the water is running three feet deep over the dam, boats drawing 4⅔ feet of water can navigate the same without difficulty.

The right of way for the canal is now in the court for condemnation, the cost of which will have to be paid from the appropriation.

A full description of the land required is as follows:

Description of land required for a canal from the Illinois River to Spring Lake, in township No. 24 north, range 7 west of 3d principal meridian.—Beginning at a point in section No. 24, 510.4 feet west of a point 500.9 feet north of the southwest corner of the northwest quarter of section No. 19, in township 24 north, range 6 west of the 3d principal meridian; thence running north, 22 degrees west, 2,300 feet to the south line of section No. 13, in township 24 north, range 7 west of 3d principal meridian, including a strip of land 75 feet wide each side of said line, containing 7.92 acres in section No. 24; thence running north, 22 degrees west, 2,600 feet, to the intersection of the south bank of the Illinois River, including a strip of land 75 feet wide each side of said line, and containing 8.95 acres of land in section No. 13, be the same more or less.

In section No. 13	8.95 acres.
In section No. 24	7.92 "
Total	16.87 "

OVERFLOWED LAND ABOVE THE DAM AT HENRY.

The General Assembly of this State passed at their last session, the following joint resolution:

Resolved by the House of Representatives, the Senate concurring herein, That a committee of five be appointed—three by the Speaker of the House and two by the President of the Senate—and that it shall be the duty of such committee to investigate, at some favorable time during the present year, all claims for damages caused by the construction of the dams at Henry, on the Illinois River, and at New Haven, on the Little Wabash River, and report—1. The number of acres of land owned by such individuals damaged by reason of the construction of the dam on the Illinois River, at Henry, and of the dam on Little Wabash River, at New Haven, with a full description, location, etc., with reference to said dams; the names of the present owners of said lands, and the different conveyances thereof, if any, since said dams were constructed. 2. The value of such land prior to the construction of such dams. 3. The value of such land since the construction of said dams. 4. The amount of damages, if any, to each tract of land, and also the damage to any and all other property injured by reason of the construction of said dams. The said committee to be authorized, if they find it necessary so to do, to employ a clerk and to send for persons and papers, and to examine witnessses, under oath, as to the questions aforesaid; and to visit the premises and take such testimony, and to report to the House and Senate, at an adjourned session, in case one is held, if not, to the House and Senate of the next General Assembly. The members of said committee shall be allowed at the rate of five dollars per day for time actually and necessarily employed in such examinations, and actual traveling expenses, but no other compensation for performing the duties herein required.

The committee appointed, as required and provided, were as follows: Senator Wm. R. Archer, of Pike county; Senator Chester P. Davis, of Piatt county; Representative Samuel S. Jack, of Macon county; Representative W. R. Wilkinson, of Wabash county, and Representative Frank N. Tice, of Ogle county.

At a meeting of the committee at Henry, on the 12th of July last, I was present at the request of Commissioner Kingman; also, of the Board of Commissioners, Messrs. Glover and Kingman, and General Superintendent Wm. Thomas, were there. The committee organized by appointing Senator Archer chairman, then the commissioners, general superintendent and myself were invited to meet with the committee, and talk over matters connected with the investigation of the claims for damages to lands, said to be overflowed.

On that day the water below the dam stood at 8.63 feet above low water mark, which was 1.63 feet higher than the dam would raise it, as that only raised the water 7 feet. The water above the dam was 1.93 feet, and there was 0.30 feet fall in the surface of water at the dam, and the water was only 0.30 feet or $3\frac{5}{8}$ inches higher than it would have been without the dam, and all the land claimed to be overflowed was covered 1.63 feet more than the dam would cover it at low water, caused by the natural stage of the river on that day. Three days before the water stood 0.60 feet higher than on that day, both above and below the dam.

At that time many of the claimants were present, more particularly from the vicinity of Snachwine Lake, and that afternoon a part if not all of the committee went with the claimants to examine the lands said to be overflowed by reason of the construction of the dam. None of the State officers went with them; but Canal Commissioner B. F. Shaw met them at Putnam.

Subsequently I was informed by letter from Senator Archer, chairman, that the committee would meet at Princeton on the 1st day of August, to commence hearing the claims, and requested me to be present. In compliance with that request I went there on the day specified, but nothing of much importance was done until the 3d, as there was no attorney on the part of the State, and no provision for one in the resolution. Mr. Charles C. Warren, of Princeton, agreed to act as attorney for the State and run the risk of getting his pay hereafter by some act of the General Assembly.

On the 3d Mr. Robert Farwell, a partner of Mr. Warren, appeared as attorney for the State, in the absence of Mr. Warren, and the work of the committee commenced. Three claims were presented by the attorney for claimants, in favor of Jacob Barnhardts, being on different pieces of land lying on lake DePue, some 15 or 20 miles above the dam, on which damages were proved to a large amount by claimant and his neighbors. I had given the attorney a series of questions to ask in regard to the different conditions of the water, but he neglected to ask them.

The committee ruled, three to two, that they would confine their examination to the year the dam was built, and the next year after, or 1871 and 1872, but on the next day changed the ruling so that the examination would cover the 11 years, for which I had the gauges of water, that is from 1867 to 1877, inclusive to date. On the 4th, in the absence of Mr. Farwell, I got permission to ask the witnesses the ques-

tions which he neglected to do the day previous, and it was agreed that the answers should apply to the claims already heard.

The next claimants were the witnesses in Barnhardt's case, and he was a witness for them, witnesses and claimants all mixed up together.

I returned to Canton on the evening of the 4th, and was again at Princeton on the 16th of August, and found that over 80 cases had been presented in Bureau county, and over 40 claims heard, and still they were coming.

I questioned witnesses some in the afternoon, and Mr. Ramsey, proprietor of the Bureau Junction Hotel, stated that he based his judgment of damages to the land on what he saw in 1870 and 1871, before the dam was built, and in 1872 after it was built; also stated that five day's flood on corn in July and August would kill it, and nothing of any amount would grow if the land was covered with water to the 15th of June. Mr. Miller, a large claimant, said about the same thing, as well as other witnesses.

Pleasc bear in mind in reference to the testimony of Mr. Ramsay as to the years in which his judgment was formed, that the water was lower in those years than in any of the 11 years, and that good crops would grow in those years.

My testimony was taken on the 17th in the forenoon on the part of the state, and in the afternoon was cross-questioned by claimant's attorney, a man who was a member of the House of Representatives of the last General Assembly, and was instrumental in getting the foregoing resolution passed, but before the examination commenced resigned his seat and became the attorney for most of the large list of claimants. He remarked before the committee that the state was only permitted to be represented as a matter of courtesy, or words to that effect. He also undertook to get the committee to take possession of my record book of water gauges, and I was in consequence required to make a copy for the committee of all that had not been published in former reports, which took a week of hard labor, when my time was required in the construction of the work at Copperas Creek.

He even went so far as to undertake to give me a lecture in regard to my duties as an engineer, and for presuming to appear in his august presence to look after the interests of the State, when his clients had so good a case without my testimony to offsett what he had proved in their favor by using for witnesses others of his clients.

A copy of the water gauges, at LaSalle, is annexed for parts of the years 1867, 1868 and 1869, not before published; and, at LaSalle, Henry and Peoria for most of the time from December 1, 1870, to November 30, 1877; and at Copperas creek, from September 1, 1873, to date. In the Commissioners' report for December 1, 1870, will be found the water gauges at Peoria from January, 1867, to May 1869; and at LaSalle, Henry and Peoria, from June, 1869, to November, 1870, and both reports will embrace 11 years, less December, 1877.

They will show the condition of the water during the summer months of all these years; and, although Henry is not included from January 1, 1867, to May 31, 1869, yet the gauges at Henry and Peoria are so near alike when the water is below ten feet, that using the gauges at Peoria for those years, arrives at very accurate results.

I would say that the water gauges for 1867 and 1868 were taken under the direction of Gen. J. H. Wilson, U. S. Engineer, and copied by myself from his book of records; at Peoria, from January to May, 1869, by the bridge tender; from June, 1869, to December, 1871, by myself, or men under my direction; at LaSalle and Henry, from January, 1872, to date, by the collector and lock tender; at Peoria, by the bridge tender; and at Copperas creek, by U. S. Engineers, myself and assistants.

The gauge at LaSalle is in reference to low water of 1867; but after the dam was built in 1871 the water was raised 4⅓ feet at this place, and this amount should be deducted from the recorded gauge, to give low water after the water was raised by dam.

By a careful comparison of the water gauges for the several years, the following facts may be obtained as to the stage of water in different parts of the river during the several years, as compared with what the dam raises the same.

In 1867 the water at LaSalle was from 8½ to 13 feet above low water in May, 7 to 13 feet in June, 4⅓ to 6½ feet to 12th of July, and low water to November.

In 1868 the water at LaSalle was from 8½ to 19 feet in May, 4⅓ to 11 feet to 28th of June, (July missing) thence low water to end of September.

In 1869 the water at LaSalle was from 9 to 23 feet from April 1st to end of August, and to 17th of September over 4⅓ feet.

In 1870 the water at LaSalle was above 4⅓ feet to 15th of May, to end of June 0.10 feet to 4.2, and low water to October.

In 1871 the water at LaSalle was 1.10 to 4.7 in May, 1.3 to 2.7 in June, 0.7 to 1.7 in July, and low water to end of September, when the dam began to raise the water. Dam at Henry closed the 20th of October.

In 1872 the water at LaSalle was from 5.1 to 6.8 in May, 4.9 to 7.1 in June, 4.6 to 4.9 in July, and low water, or about 4.4, the balance of the year, the dam raising the water 4.4 at this point in low water.

In 1873 the water at LaSalle was from 9.2 to 13.7 in May, 4.10 to 9.0 in June, 4.9 to 7.0 in July, and 4.4 to 4.9 balance of year.

In 1874 the water at LaSalle was from 5.1 to 9.0 in May, 4.10 to 7.0 in June, and 4.4 to 4.10 to end of year.

In 1875 the water at LaSalle was from 5.7 to 6.1 in May, 4.9 to 6.1 in June, 4.9 to 9.2 in July, 5.9 to 14.3 in August, and 5.1 to 8.11 in September and October.

In 1876 the water at LaSalle was from 8.0 to 12.0 in May, 6.0 to 18.5 in June, 6.5 to 13.0 in July, and 4.10 to 6.4 to end of October.

In 1877 the water at LaSalle was from 6.0 to 11¾ in May, 5.1 to 8.1 in June, 4.10 to 8.6 in July, 4.8 to 4.10 in August, and 4.4 to 6.8 to end of October.

In 1867 the water at Peoria was from 7.0 to 12⅓ in May and June and to July 4th; after that date to end of October it was from 6.10 to low water.

In 1868 the water at Peoria was from 8.0 to 15.8 in May, 7.0 to 12.5 to June 2d, 5.1 at end of June, and from 1.0 to 4.10 in July, and to end of October about low water.

In 1869 the water at Peoria was 9.7 to 13.7 through the month of ay.

In 1869 the water at Henry was 10.9 to 21.8 in June, July and August, and 3.45 to 9.9 in September.

In 1870 the water at Henry was less than 7 feet after the 9th of May through the year.

In 1871 the water at Henry was less than 7 feet, after April 28, all the year.

In 1872 the water at Henry was less than 7 feet from April 22 to June 7; then for 8 days in June it averaged 8 feet, and after June 16 it was less than 7 feet for the balance of the year.

In 1873 the water at Henry was 10.6 to 12.6 in May, 7.3 to 10.4 to June 14, and below 7 feet after that date to end of year.

In 1874 the water at Henry was over 7 feet to May 14, run down to 2 feet July 1, and below 2 feet for balance of year.

In 1875 the water at Henry was less than 7 feet to July 28, thence to September 1 it was from 7 to 12½ feet, and in September was 4½ to 7⅔ feet.

In 1876 the water at Henry was from 7 to 14¼ feet to August 5, and from 2½ to 7 feet the rest of the year.

In 1877 the water at Henry was from 7 to 11 feet in May, 4 to 8 feet in June, 7 to 9¼ feet to July 17, and less than 7 feet to November 1.

From the foregoing it may be seen that no crops could have been raised in the years 1867, 1868 and 1869 except, perhaps, some grass in the latter part of 1867 and 1868. In 1870 and 1871 the stage of water was very favorable for crops. In 1872 to June 8 the water was favorable, but 8 days at that time must have destroyed the crops; after that some grass might have grown. In 1873 the water was too high for crops in May and June. In 1874 the water was favorable for good crops. In 1875, 1876 and 1877 no crops could have been raised on land flowed from the dam, except some grass in the first part of 1875. To sum up, only three good crops could have been raised in the 11 years.

The dam raised the water at Henry 7 feet in low water; at Hennepin, 6 feet; at Lake DePue, 5⅓ feet; at LaSalle, 4⅓ feet.

If it should be considered of sufficient importance hereafter, a survey can be made and levels taken on every piece or parcel of land claimed to be flowed, which would show at a glance the elevation of each part of each tract as compared with the hight of dam, and will also represent the condition of said land without regard to the dam, or if it had not been built, during every month in the year, by a comparison of the annual water gauges. A comparison could be made with the original government survey of the land, which would show how much of the land was covered with water when that survey was made, and at what stage of water in the river this work was done.

FUTURE IMPROVEMENTS OF THE ILLINOIS RIVER.

It will require three more locks and dams to complete the improvement of the river, estimated to cost $1,350,000. One lock to be located at Beardstown, or a few miles below; one at or near Bedford, and the other about six miles above the mouth of the river.

With these locks and dams built, this river will become one of the most important channels of commerce in the United States, and perhaps in the world. At all seasons of navigation, steamboats, propellors, tugs, barges and other water craft drawing six feet of water can navigate the same, and with this increase of depth can more success-

fully compete for the carrying trade than any other route, and produce a great saving in cost to the shipper or producer.

Freight can be transported from St. Louis to Chicago for one-half cent per ton per mile, the distance being about 370 miles, would be $1.85 per ton, or 9¼ cents per 100 pounds, which would be 5.55 cents per bushel for wheat, and 5.18 cents for corn, and only about one-quarter of this amount would be for tolls on the canal and locks, which would give $1.40 per ton net freight.

Eight Canal boats and a propeller or a tug can pass each lock on the river at one lockage, and all would carry from 1,800 to 2,000 tons of freight, giving not less than $2,000 above tolls. For the return trip from Chicago these same boats would transport from 1,000,000 to 1,200,000 feet (b. m.) of pine lumber at $3,00 per M. feet, making freight bills not less than $2,500 above tolls. This gives $5,000 for freight above tolls for the round trip, and could be made in two weeks.

The established freight by railroads for distances equal to that between St. Louis and Chicago, is 11.91 cents per bushel for wheat, and 11.14 cents for corn For pine lumber it is $6.25 per M. feet, which is more than double the freight by river and canal. This is, perhaps, as low as the railroads can carry and make it profitable, as the canal and river rates would not pay the railroads the actual cost of transporting freight.

The business of the past year on the Erie canal in New York, I am informed, has demonstrated that railroads cannot compete with the same for transporting grain and other heavy freight. It is said that the tonnage of that canal for the past year will be far greater than ever before, notwithstanding the efforts of the trunk lines of railroads to draw away its freight.

The same will be the result on the Illinois and Michigan canal and the Illinois river, when the other three locks are completed, and the tolls on the canal will be increased in a short time from the mere pittance they are now, to at least five times the amount, and in ten years the increase will be tenfold.

Take the articles of corn and lumber, which form a very considerable portion of the business of the canal, about one-eighth of all the corn received at Chicago is by the Illinois and Michigan canal, and one-twelfth of all the lumber shipped from Chicago is by said canal, and a very small part of the territory is now reached which would be tributary to the river and canal with this improvement completed.

At St. Louis the average tons of freight received from the Illinois river for the last five years was 155,000, which was one-fifth of all the freight received by all the Western rivers, and one-twentieth part of all received by rail from all the fifteen railroads centering from every direction.

The number of steamboats arriving at St. Louis in 1876 was 2,122, of this number 299 were from the Illinois river. The departures were 2,118, and 289 were for the Illinois river, making over one-eighth part from this river, and more than arrived from all the other rivers except the upper and lower Mississippi.

From the foregoing it may be seen how important the completion of this improvement will be to the people of this and adjoining States. With such a channel of commerce opened, all parts of the State will receive benefit, and although it may not be direct to parts

not contiguous, yet it will have a great influence on rates of freight in various parts, if not all over the State, and will become the great regulator of the carrying trade, as the Erie canal is in New York.

With this view of the subject no one can doubt the importance of this improvement to the people of this State and many of the western States, and the results to be derived ought not to be put off by the non-completion of the same. What is now done is more a local benefit to the towns and counties bordering or contiguous to this part of the river, and it is really a great advantage to the people residing in the same. They are now reaping practical benefits in the cheap freights of their products to market and in the receipt of their lumber, salt and other heavy articles, as the freights are reduced from 30 to 50 per cent. during the season of navigation.

If the funds were provided, the locks and dams could be built in three years. It would require, say $350,000 the first year, $450,000 the second year, and $550,000 the last year; and the net revenues of the canal and locks on the river ought to produce $350,000 by the time this work is completed. From May 1, 1871, to November 30, 1876, the net revenues were $474,995.15, or more than $80,000 per year. In 1873 and 1874 they averaged over $100,000, but since that time there has been a falling off, due to the short crops and general stagnation of business. It can safely be estimated that the $350,000 will be realized from the net revenues by the time of completion of this work. This will leave one million dollars to be provided from other sources in the three years, which can all be repaid, with the interest, in five years after its completion, from the increased revenues of the canal and river.

This river improvement will be the least expensive for its length and capacity of any improvement ever made in this or any other country, and is destined to have an immense amount of commerce upon it, being an outlet by water communication to the east, from the Mississippi river and all its vast tributaries, and opening a good water communication from Chicago to St. Louis, New Orleans and all other southwestern cities. With all the locks and dams completed, and what has and may be expended by the United States government in dredging, it will not cost over $12,000 per mile. The Erie canal in New York, 350 miles in length, has cost about $90,000 per mile, or over thirty millions of dollars. The improvement of the rapids of the Mississippi at Keokuk has or will cost $375,000 per mile or $4,500,000, and at Rock Island from $75,000 to $100,000 per mile, or over one one million dollars. Its capacity for commerce will be about equal to the Mississippi river, and very much larger than the Erie canal, as twelve of those canal boats could pass through these locks at the same time.

It seems to me that the citizens of this state ought to have a just conception of the magnitude of this route for commerce, and to feel proud that they have such a channel within their borders, which, with the comparatively small amount of money required to complete it, will make it an important highway for the carrying trade of the great West. It will produce such low rates on heavy freights that it will increase the wealth of the producing class of citizens in this vast Western territory to untold millions, and where this wealth is being increased, all other branches of industry and commerce are proportionally improved.

It is a mistaken idea that this route is to any great extent in opposition to the railroad interest. The country requires all the facilities it can have for its carrying trade, and every channel of importance should be opened to aid in this great necessity. It is fallacious to say that this or that improvement should not be made because, forsooth, it may interfere with or compete for the business of some other route.

It would be just as extravagant to say that no competition should exist in the mercantile, mechanical, or any other business interests of this country; that all should flow in one particular channel and be controlled by a few men, and all others should be subservient to them, and run in their line, or not at all. What an absurdity would such a state of things be, and how quick would the people rise up in opposition to such a state or condition of matters, and be justified in so doing.

The people could not do without railroads as a matter of convenience and necessity, and they have been the means of increasing the wealth of this country to a very great extent; but because this is the case the owners and managers should not stand back and say, we have produced this result and we must have the control of the carrying trade at our own prices. No one must think of building a canal or improving a river, for it will encroach on our business, and the agitation of this enterprise must cease without delay. Such a state of things is not in accordance with general business interests or with the principles of free government, under which we live.

The friends of this improvement are not by any means opposed to railroads, but believe them to be a necessity for the country, which the people could not do without. They also believe that our citizens need and require every available channel of commerce opened and put in practical condition for business; and further, the time is soon coming when there will be no lack of business for any of these routes, at remunerating rates, and that every route shall take its share of the commerce which is particularly adapted to its condition and construction.

I believe that the time is not far in the future when not only this part of the improvement of this river, now under consideration, will be completed, but that the Illinois and Des Plaines rivers will be improved from La Salle to Joliet, and that the Illinois and Michigan Canal will be enlarged from Joliet to Chicago, all to the same capacity of the improvements already made on this river. Then will steamers take in their cargoes at New Orleans, or at any other south-western city located on the Mississippi river or its tributaries, and land them at the wharves in Chicago, or, load their vessels in Chicago and deliver their cargoes at any of those cities, without hindrance or transshipment. Then an inland water communication will be opened between the Gulf of Mexico, New Orleans, St. Louis and other cities of the great west and south-west, with the city of New York in one direction and with the cities located on the St. Lawrence river and the Gulf of St. Lawrence in another direction, and through both routes and the extremes connect with the Atlantic ocean.

Taking all these questions into the account, this route becomes national instead of sectional, and will be at all times of great service to the national government in the transportation of heavy ordnance

stores to various ports on these connecting waters, and for the transfer of inland naval vessels in the same manner. It is also a great connecting link that will bind a vast part of this country together, and, therefore, becomes national, and leads to the question: Should the U. S. Government aid in the completion of this national improvement?

It certainly is of much more importance than the improvement of the Fox and Wisconsin rivers, in the State of Wisconsin, in which the U. S. Government is now engaged. It connects with the Mississippi river some 500 or more miles south, and makes a route of so much greater magnitude in regard to its dimensions for the large class of vessels, which the other route can never obtain.

IMPROVEMENTS BELOW COPPERAS CREEK LOCK IN RIVER.

For about one-half mile below, the river at low water is only from three to four feet deep, and will require dredging to five feet to make it on a level with the lower miter sill of lock. This the United States government will probably do when there is money.

I applied to Col. J. N. Macomb, the U. S. Engineer in charge of that kind of work on this river, to have the work done last fall, but he declined, saying that there was no money. He gave assurances that it should be done when congress made another appropriation for this river, and I confidently hope that it will be done the coming season.

There is said to be another bar some two or three miles below the lock. With these two points deepened to five feet at low water, there will be good navigation for present class of boats to Havana, a distance of 18 miles, or 108 miles from LaSalle. It will probably cost from $8,000 to $12,000.

In 1870 an arrangement was made by the Board of Canal Commissioners and Gen. J. H. Wilson, the government engineer in charge of this river at that time, that the government would do all the necessary dredging at different points to make the required depth of water between the locks, which the State would or were building. This agreement was made with a view of building the dams of less height, in order to save the overflow of the lowlands along the river, and it has been thus far carried out on the part of the government.

Illinois and Michigan Canal.

At the request of the old Board of Commissioners, on the 31st of May, I made a trip over the canal from Chicago to Lockport, both the old and new boards and Mr. Wm. Thomas, General Superintendent of Canal being present, and found that part of the canal in good order. At the meeting of your board held at Lockport on that day, I was reappointed the Chief Engineer of the work in your charge. I was then requested at some future time to meet your Board and the General Superintendent at LaSalle, and make a trip of examination over the balance of canal.

On the 15th of June we all met at LaSalle about 2 P. M. and started up the canal on the little steamer Illinois, Col. Utley one of the former board being with us. We went over the canal to Ottawa and up to the Dayton dam on the Fox river feeder that afternoon. On the morning of the 13th we started from Ottawa (Col. Utley having gone

home) and went over the whole length of canal to Joliet on that day examining the canal and all the important structures.

The commissioners all went home from Joliet, and Mr. Thomas and I went to Lockport on the 14th. I examined the old plans of locks and aqueducts on file in the General Office, so as to be prepared to make a report, as requested, of my views of the condition of the canal and its structures, and what was necessary to be done to place the whole work in good order

On the 15th I returned to Canton and immediately made estimates of the cost of the necessary repairs on all the structures before the 1st of April, 1879, and on the 17th I made up a report and forwarded the same to your board, a copy of which is hereto added.

At the request of Mr Thomas, I had a plan gotten up under my directions for re-building Lock No. 10, and wrote out a specification for the masonry of lock walls.

On the 28th of June, at the request of Mr. Thomas, I went to Lockport, and on that and the next day examined the stone with him at several quarries, the owners of which had made propositions to him, to furnish stone for the rebuilding said lock No. 10. We agreed to recommend the proposition of the Singer and Talcott Stone Co. to your Board to be adopted, for rebuilding said lock at Marseilles. The stone to be furnished this season in order that the lock might be rebuilt before the opening of navigation next spring.

No charge has been made to the canal for these services, except for actual expenses, and the time of myself for over one half month, and of my assistant of at least one week in drawing the necessary plans, have all been included in engineering expenses for the lock and dam at Copperas Creek.

CHIEF ENGINEER'S OFFICE,
CANTON, June 17, 1877.

To the Hon. Board of Canal Commissioners :

GENTLEMEN:—In compliance with your request I have made a personal examination of the Illinois and Michigan Canal from La Salle to Joliet, in company with your honorable board and General Superintendent, and desire to make the following report of my views in regard to the general condition of that part of the canal, and of the extraordinary repairs necessary to sustain the canal and keep it in good navigable condition.

The banks of the canal are generally in good order and can be kept so with the labor that is being expended upon them from month to month, and as in all canals, requires constant vigilance on the part of the employees.

Locks Nos. 12, 13 and 14 are in good condition and require but little repairs with the exception of the gates, and those come under the head of necessary repairs. Locks Nos. 8 and 11 are in rather bad condition, from the quality of the stone, the face of which is crumbling off from the action of the weather and will require rebuilding in a few years, but can be maintained for the present by using either timber or stone to replace some of the stone. Lock No. 10 was built of a very poor quality of sand stone, the face of which broke off some 10 or 12 years ago, and was replaced by plank and timber. At the head and foot of this lock, this last work is in bad condition, as some of the largest boats have great difficulty in entering the same, and there

is great danger of its becoming still worse in a short time. I would recommend the rebuilding this lock within the next year, of stone, using new stone for face and old stone for backing. If funds are short the ends can be rebuilt and part of the chamber can be sustained for several years, but I do not consider it economical so to do, if there was plenty of money. I have made estimates for both plans.

Lock No. 9 was built from the same kind of stone as No. 10, with a similar result. The face of this lock was rebuilt last winter, without taking down the backing or rear walls, and appears now to be in good condition; but I do not approve of repairing a lock in that manner. The face should all be removed, and the backing, down to within two to four feet of bottom, and the face and backing built up and bound together. There is great danger that the use of the same and the frost will separate the two walls, and crowd the face into the lock.

Locks Nos. 6 and 7 are in good condition. The Guard Lock, at Joliet, is also the same. The other five locks, from Joliet to Lockport, I have found, from former examination, have been more or less affected by the action of frost on the face stone, and have been repaired by timber, and will last for a number of years, with more repairs of a similar kind.

The superstructures of the aqueducts have all been in use for 10 or 11 years, except the Kankakee, which was rebuilt last winter, and all the others will require rebuilding in the two years. Nettle Creek, at Morris, requires rebuilding before the opening of navigation next spring; the others can be made to stand another year, but probably all will have to be rebuilt before the opening of navigation in 1879. The timber for all should be contracted this year, to be delivered in the early part of the season of 1878, which gives the benefit of the winter to cut the timber, and thus reduce the price very materially; but no expense is incurred until the timber is delivered.

I have made estimates of the cost of each aqueduct.

The masonry in the piers of Fox River Aqueduct, at Ottawa, is in bad condition, the same action of frost is being had upon them as on the masonry of some of the locks, and the moving of the ice in the river, in the spring, is having a very serious effect upon them; two of the piers are in a very serious shape. I would recommend that the stone be procured for rebuilding one-half of the upper end of one pier this summer, and that the same be taken down and rebuilt this winter. By doing this work on one pier it will expose to view the condition of the center of the walls, as they are very thick, and from that you will learn definitely whether the whole structure is in any immediate danger. The other piers can be protected at the head so as to prevent the ice doing any damage for the present. The abutments were repaired last winter. I present an estimate of the cost of one pier.

The masonry in the other aqueducts is in fine condition and will last for some time.

The bridges on the canal which belong to the State are generally in good order, except the superstructure of Tow Path bridge over DuPage river at Channahon which must be re-built this year.

The dam across Fox river at Dayton for Fox river feeder is being repaired and extended 127 feet in consequence of the high water last spring, making a new channel in rear of east abutment; this is

nearly completed and will be in good condition. Some repairs are necessary at the head of the Guard lock; when this is done the feeder will be all right.

The apron to the dam across the DuPage river at Channahon needs considerable repairs, but this will be done by the ordinary repair hands. The other dams at Wilmington and Joliet are all in good order.

I herewith present a summary of the estimated cost of the extraordinary repairs which will be necessary in the next two years, making an aggregate of $45,400. From this I have deducted $30,300 which is not actually necessary to be made and completed before the opening of navigation in 1879, leaving $15,100 required before next Spring.

SUMMARY OF EXTRAORDINARY REPAIRS.

Superstructure of Vermilion Aqueduct	$5,800	
Piers of Fox river aqueduct	4,000	
Superstructure of Fox river aqueduct	15,000	
Arch of Walbridge culvert	400	
Re-building Lock No. 10	13,200	
Arch of Kickapoo Culvert	500	
Superstructure of Nettle Creek aqueduct	1,000	
" of Aux Sable aqueduct	4,500	
" of Tow Path bridge at Cannahon	1,000	
Total		$45,400

DEDUCT NOT NECESSARY THIS YEAR.

Superstructure of Vermilion aqueduct	$5,800	
" of Fox river aqueduct	15,000	
" of Aux Sable aqueduct	4,500	
Chamber Lock No. 10	5,000	30,300
Required this year		$15,100

ENGINEER DEPARTMENT.

Since the date of last report, my services and that of my assistant have continued until this date, the month of October being charged to the Spring Lake Canal, although the services were partly rendered for the work in August and September. An inspector has been employed for about one and one-half months in August, September and October. The total expenses for engineering has been increased by the extension of time for the completion of work, by the unfavorable seasons of 1875, 1876 and 1877, on account of the stage of water in the river. In consequence of this the time of completion has been extended about two years.

A small part of the above services have been performed on the Illinois and Michigan Canal, as above mentioned. Amount, say $200 paid from this fund.

EXPENSES FOR ENGINEERING.

	1874.	1875.	1876.	1877.	Totals.
For services of engineers	$6,142 41	$7,453 89	$5,945 41	$5,985 45	$25,527 16
" office furniture	87 66	10 00	5 25	.....	102 91
" stationary	60 05	11 35	18 92	10 00	100 32
" postage and telegrams	5 05	19 50	18 85	16 15	59 55
" incidentals	151 97	103 77	31 74	120 78	408 26
Totals	$6,447 14	$7,598 51	$6,020 17	$6,132 38	$26,198 20
Estimate for engineering last year					25,165 82
Increase for engineering over last year					$1,032 38
Increase for engineering over est. of 1874					7,059 11

This increase is caused by not being able to complete the work by the 1st of October, as contemplated.

COST OF THE WHOLE WORK.

In the last report was an estimate of the extra cost of the work, which is not materially changed in the aggregate, and the appropriation by the last General Assembly covers the whole cost.

A copy of the final account of the work performed under the contract, is annexed, also copies of the accounts of work done on foundation, as paid for by the United States and by the State.

The entire cost of the lock and dam and all its appurtenances will be as follows:

Amount expended by the United States on foundation, expenses for engineering and contingencies not included		$62,359 80
Amount expended on foundation, by State	$11,367 33	
" of final account on contract for lock and dam	306,684 10	
" expended for engineering, by State	26,198 20	
" expended for contingencies, by the State	3,497 88	
Total cost, by State		$347,747 51
Total cost		$410,107 31
Estimated cost December 1, 1870		$427,493 00
Difference of cost less than the estimate of 1870		17,385 69

There is added to the report the following detailed accounts:

No. 1. Statement showing monthly estimates, 15 per cent. retained payments, etc.

No. 2. Statement of contingent expenses on lock and dam, and total expenses on Spring Lake Canal.

No. 3. Final account of work done on the contract for lock and dam.

No. 4. Final account of work done on foundation, by the U. S.

No. 5. Final account of work done on foundation, by the State.

No. 6. Water gauges of Illinois river, at LaSalle, Henry, Peoria and Copperas Creek.

I desire to express my obligations to your honorable board, and of the late board, for the courtesy that I have received personally from each and all, and for the kind and efficient manner in which I have been sustained during the progress of this very important work, and to say that the citizens of this State have reason for congratulation, that another link of this great work has been completed under the direction of the two Boards of Canal Commissioners, for less cost than the amount specified as the limit, in the act of April 17th, 1873, (or $430,000), notwithstanding all the difficulties that have occurred during its progress.

And now permit me in closing, to commend to your kind consideration my assistant, Mr. Charles Levings, and my principal inspector Mr. Robert Ross, who have rendered valuable services in the execution of this work, and who justly deserve their share of the credit for its successful completion.

And furthermore would I say that we are under many obligations to the contractor, Mr. Archibald McArthur, and his brothers William and James, and to their principal foreman, Mr. Wm. P. Hall, who has

had charge of the wood work, and Mr. Thomas Carroll, who has had charge of most of the work for the last two years, and Messrs. Jay L. Johnson and Arch. A. Shults, their gentlemanly clerks, for the efficient manner in which they have performed their work, to our entire satisfaction, and for the especial cordiality and courtesy under all and every circumstance which has existed in the performance of every requirement from this department. All of which is respectfully submitted.

DANIEL C. JENNE,
Chief Engineer.

No. 1.—*Statement showing the total work done in each month, the 15 per cent. retained, and the payments on Lock and Dam at Copperas Creek.*

Year.....	Month work done in.	When paid.	To whom paid.	Total estimate.	Work done during the month.....	Monthly 15 per cent..	Total 15 per cent.....	Monthly Payments.	Total Payments.
1874	March..	April 10	W. Johnson...	$900 00	$900	$135	$135	$765 00	$765 00
"	April&May	June 10	" "	3,780 00	2,880	432	567	2,448 00	3,213 00
"	June.....	July 10	" "	8,280 00	4,500	675	1,242	3,825 00	7,038 00
"	July.....	Aug. 10	" "	10,800 00	2,520	378	1,620	2,142 00	9,180 00
"	August.....	Sept. 10	" "	13,140 00	2,340	351	1,971	1,989 00	11,169 00
"	September	Oct. 10	" "	20.120 00	6,980	1,047	3,018	5,933 00	17,102 00
"	October.....	Nov. 10	" "	43.080 00	22,960	3,444	6,462	19,516 00	36,618 00
"	November..	Dec. 10	" "	61,520 00	18,440	2,766	9,228	15,674 00	52,292 00
"	December .	Jan. 10	" "	65,580 00	4,060	609	9,837	3,451 00	55,743 00
1875	January	Feb. 10	" "	68,480 00	2,900	435	10,272	2,465 00	58,208 00
"	February...	Mch. 10	" "	69,600 00	1,120	168	10,440	952 00	59,160 00
"	March.	April 10	" "	71,300 00	1,700	255	10,695	1,445 00	60,605 00
"	April	May 10	" "	87,580 00	16,280	2,442	13,137	13,838 00	74,443 00
"	May.....	June 10	" "	109,420 00	21,840	3,276	16,413	18,564 00	93,007 00
"	June.....	July 10	" "	131,060 00	21,640	3,246	19,659	18,394 00	111,401 00
"	July.....	Aug. 10	A. McArthur	144,020 00	12,960	1,944	21,603	11,016 00	122,417 00
"	August.....	Sept. 10	" "	148,600 00	4,580	687	22,290	3,893 00	126,310 00
"	September	Oct. 10	" "	152,120 00	3,520	528	22,818	2,992 00	129,302 00
"	October	Nov. 10	" "	158,720 00	6,600	990	23,808	5,610 00	134,912 00
"	November..	Dec. 10	" "	170,840 00	12,120	1,818	25,626	10,302 00	145,214 00
				⅓ of 15 per	cent.	on			
"	November..	Dec. 10	" "	completed	Lock	walls..	20,126	5,500 00	150,714 00
"	December .	Jan. 10	" "	177,840 00	7,000	1,050	21,176	5,950 00	156,664 00
1876	January	Feb. 10	" "	182,260 00	4,420	663	21,839	3,757 00	160,421 00
"	February....	Mch. 10	" "	184,780 00	2,520	378	22,217	2,142 00	162,563 00
"	March.....	April 10	" "	186,780 00	2,000	300	22,517	1,700 00	164,263 00
"	April	May 10	" "	190,820 00	4,040	606	23,123	3,434 00	167.697 00
"	May	June 10	" "	194,340 00	3,520	528	23,651	2,992 00	170,689 00
"	June	July 10	" "	197,100 00	2,760	414	24,065	2,346 00	173,035 00
"	July.....	Aug. 10	" "	200,640 00	3,540	531	24,596	3,009 00	176,044 00
"	August.....	Sept. 10	" "	205,460 00	4,820	723	25,319	4,097 00	180,141 00
"	September	Oct. 10	" "	212,420 00	6,960	1,044	26,363	5,916 00	186,057 00
"	October.....	Nov. 10	" "	223,700 00	11,280	1,692	28,055	9,588 00	195,645 00
"	November..	Dec. 10	" "	237,460 00	13,760	2,064	30,119	11,696 00	207,341 00
"	December .	Jan. 10	" "	244,740 00	7,280	1,092	31,211	6,188 00	213,529 00
1877	January.....	Feb. 10	" "	252,180 00	7,440	1,116	32,327	6,324 00	219,853 00
"	February...	Mch 10	" "	254,320 00	2,140	321	32,648	1,819 00	221,672 00
"	March.....	April 10	" "	256,400 00	2,080	312	32,960	1,768 00	223,440 00
"	April	May 10	" "	258,440 00	2,040	306	33,266	1,734 00	225,174 00
"	May	June 10	" "	262,200 00	3,760	564	33.830	3,196 00	228,370 00
"	June	July 10	" "	265,320 00	3,120	468	34,298	2,652 00	231,022 00
"	July.....	Aug. 10	" "	270,340 00	5,020	753	35,051	4,267 00	235,289 00
"	August.....	Sept. 10	" "	277,820 00	7,480	1,122	36,173	6,358 00	241,647 00
"	September	Oct. 10	" "	289,600 00	11,780	1,767	37,940	10,013 00	251,660 00
"	October.....	Nov 10	" "	298,400 00	8,800	1,320	39,260	7,480 00	259,140 00
"	October.....	Nov. 10	" "	On 15 per	c't. re	tained	9,260	30,000 00	289,140 00
"	Nov'mb'r }		" "	306,684 10	.....	.....	.....	17,544 10	306,684 10
"	Dec'mb'r }	.....							
								$306,684 10	

No. 2—*Statement of Contingent Expenses.*

Date.		Names.	Object of Expenditure.	Amo'nt.	Aggregate.
1873. Dec.	10	H. G. Anderson	Expenses as Commissioner	$30 92	
"	10	Telegraph and Herald Co...	Printing specifications, etc	94 50	
"	10	Wm. Milne	Express charges	8 55	
"	10	Chicago Evening Journal..	Advertising notice of proposals	215 00	
"	10	Inter-Ocean	Advertising notice of proposals	196 61	
"	10	Peoria Transcript	Advertising notice of proposals	40 00	
					$585 58
1874. April	10	Telegraph and Herald Co...	Printing	17 50	
"	10	H. W. Baughman	Certified plat	3 70	
					21 20
May	10	H. G. Anderson	Expenses as Commissioner	19 65	19 65
June	10	Jacob Maher	Repairs of little tug Illinois	15 90	
"	10	Steamer Fayette	Freight	4 05	
"	10	Joseph Utley	Railroad fare	15 05	
					35 00
July	10	H. G. Anderson	Expenses as Commissioner	35 25	
"	10	Jacob Maher,	Repairs of tug Illinois.	5 00	
"	10	Steamer Fayette	Coal for tug Illinois	4 80	
"	10	J. M. Hotchkiss	Anchor for tug Illinois	9 00	
					54 05
Aug.	10	Wm. Comegis	Building house at lock	1,315 00	
"	10	H. W. Baughman	C't & Cl'k's fees for land cond'm'd	66 75	
					1,381 75
Sept.	10	H. G. Anderson	Railroad fare	26 80	26 80
Oct.	10	J. O. Peck	Painting house at lock	100 00	
"	10	Peoria Transcript	Blank vouchers	4 75	
"	10	State Bank, Springfield	Expressage on currency	6 75	
"	10	Wm. Milne	Expressage on currency	5 00	
					116 50
Nov.	10	A. Bruce	Foundation of house at lock	9 44	
"	10	H. P. Sively	Use of steamer "Last Chance"	60 00	
"	10	First Nat'l Bank Peoria	Exchange	7 75	
"	10	H. G. Anderson	Expenses as Commissioner	29 25	
"	10	W. N. Brainard	Expenses as Commissioner	29 00	
"	10	Joseph Utley	Expenses as Commissioner	22 65	158 09
			Total to Dec. 1, 1874		$2,398 62
1875. Jan.	10	J. T. Rogers	Flag staffs and rods	3 50	3 50
Feb.	10	Joseph Utley	Expenses as Commissioner	22 05	
"	10	W. N. Brainard	Expenses as Commissioner	55 25	
"	10	H. G. Anderson	Expenses as Commissioner	68 91	
					146 21
April	10	State National Bank	Exchange	27 18	27 18
May	10	H. W. Baughman	Court fees and costs	68 65	
"	10	R. S. Dows	Pants	10 00	
"	10	Prasten & Tripp	Lumb'r for porches to house at l'ck	38 83	
"	10	Steamer Fayette	Freight	5 00	
"	10	Joseph Utley	Expenses as Commissioner	21 90	
"	10	W. N. Brainard	Expenses as Commissioner	15 00	
					159 38
Aug.	10	Joseph Utley	Expenses as Commissioner	35 25	
"	10	W. N. Brainard	Expenses as Commissioner	36 00	
"	10	H. G. Anderson	Expenses as Commissioner	28 00	
"	10	State National Bank	Exchange	29 11	
"	10	Thomas A. Boyd	Legal services in condemning land	100 00	
					228 36
Nov.	10	State National Bank	Collection and paying requisition..	6 59	
"	10	Jay McClure	Use of steamer "Frances"	15 00	
"	10	Peoria Transcript	Envelopes for Commissioners	2 25	
"	10	D. H. Tripp & Co	Stationery for Commissioners	3 40	
"	10	Joseph Utley	Expenses as Commissioner	23 30	
"	10	W. N. Brainard	Expenses as Commissioner	19 50	
"	10	H. G. Anderson	Expenses as Commissioner	17 05	87 09
			Total to Dec. 1. 1875		$3,050 34
1875. Dec.	10	Mrs. C. Tompkins	Damages to land at Copperas Creek	15 00	
"	10	United States Express Co...	Expressage of money	12 35	
					27 35
1876. March	10	J. M. Frank & Son	Blank vouchers	7 50	
"	10	H. G. Anderson	Expenses as Commissioner	4 60	
					12 10
June	10	H. G. Anderson	Expenses as Commissioner	6 20	6 20
Sept.	10	H. G. Anderson	Expenses as Commissioner	7 75	7 75
Nov.	10	H. G. Anderson	Expenses as Commissioner	14 25	
"	10	Joseph Utley	Expenses as Commissioner	6 60	
"	10	Kingman & Co	Grass seed	4 20	25 05
			Total to Dec. 1, 1876		$3,128 79

No. 2.—Continued.

Date.	Name.	Object of Expenditure.	Amo'nt.	Aggregate.
1877. April 10	W. S. Myers (Notary)	Taking Com's affidavit to estimate	$2 25	
" 10	H. G. Anderson	Expenses as Commissioner	53 90	
				$56 15
Jan. 10	W. N. Brainard	Express and map	16 20	16 20
June 10	H. G. Anderson	Expenses as Commissioner	1 70	1 70
Sept. 10	Jacob Shaffer	Use of propeller Water Lilly	15 00	
" 10	Benj. F. Shaw	Expenses as Commissioner	11 25	
" 10	Martin Kingman	" " "	3 25	
				29 50
Oct. 10	Peoria Transcript	Advertising closing river	5 00	
" 10	W. F. Dowdall	" " "	4 50	
" 10	J. O. Glover	Expenses as Commissioner	12 65	
				22 15
Nov. 10	Globe Printing Co	Advertising closing river	31 20	
" 10	George Heath	Patent fee on lock valves	100 00	
" 10	W. S. Myers	Taking Com's affidavit to estimate	3 00	
" 10	Stephen Dows	" " "	1 50	
" 10	Jacob Shaffer	Use of propeller Water Lilly	15 00	
" 10	J. O. Glover	Expenses as Commissioner	16 54	
" 10	Martin Kingman	" " "	12 50	
" 10	B. F. Shaw	" " "	17 35	
				197 09
Dec. 18	D. C. Baldwin	Lamps for lock	46 30	46 30
		Total contingent		$3,497

Expenditures for Canal from Illinois River to Spring Lake.

Date.	Name.	Object of Expenditure.	Amo'nt.	Aggregate.
1877. Oct. 31	Peoria Transcript Co	Advertising Letting	$10 00	
" 31	W. F. Dowdall	" "	11 50	
" 31	W. H. Bates	" "	5 00	
" 31	S. Y. Thornton	" "	10 50	
" 31	Berry & Magie	" "	2 50	
				$39 50
" 31	Cobleigh & Buchanan	Contract	3,955 35	3,955 35
" 31	Daniel C. Jenne	Chief Engineer and contingent	340 13	
" 31	Chas. Levings	Asst. " "	158 30	
" 31	John McMahon	Chainman	17 50	
" 31	Thos. Fitzgerald	Axeman	11 37	
				527 30
" 31	McArthur Bros	Use of tug E. S. McCook	44 00	
" 31	B. F. Shaw	Expenses as Commissioner	9 75	
" 31	Martin Kingman	" " "	8 50	
" 31	J. O. Glover	" " "	1 00	
				63 25
				$4,585 40

No. 3—Final Account.

STATE OF ILLINOIS—*For Improvement of Illinois River, To Archibald McArthur, Dr.*

For materials furnished and labor performed in the construction of a Lock and Dam (except foundation of Lock) at Copperas Creek under the contract of Willard Johnson, dated the 9th day of December, 1873, and assigned to Archibald McArthur the 17th of July, 1875, with the consent of the Canal Commissioners dated the 21st of July, 1875.

Quantities.	Measure.	Items.	Contract Price.	Amounts.
1	Number.	Grubbing and clearing	$100 00	$100 00
1	"	Bailing and draining	5,000 00	5,000 00
59,422.78	Cubic Feet.	Excavation of earth	17	10,101 87
6,973.17	"	Embankment for canal, lock, and dam	16	1,115 71
89,286.58	"	Embankment for guard banks	15	13,392 99
2,951.07	"	Lining	60	1,770 64
1,334.32	"	Puddling	20	266 86
14,195.39	"	Loose stone in dam and elsewhere	2 55	36,198 24
8,187.87	"	Brush and gravel in any part of the work	20	1,637 57
5,758.26	"	Brush and stone " " " "	4 00	23,033 04
893.08	"	Slope and pavement wall	2 95	2,634 59
3,650.48	"	Uncut or battered wall laid in hydraulic cement	8 00	29,203 84
1,053.60	"	Concrete masonry	5 00	5,268 00
8,665.03	"	Cut stone masonry in lock walls	13 00	112,645 39
890.52	"	Uncut masonry in abutments to dam	11 60	9,796 27
79,169	Ft.B.M.	White oak timber in lock gates and elsewhere	65 00	5,145 99
122,548	"	Timber of all kinds in foundations to vertical walls	18 00	2,205 86
650,443	"	" " in construction of dam	22 00	14,309 75
338,179	"	Plank and boards of all kinds in any part of the work	20 00	6,767 08
15,508	Lin. Feet.	Furnishing and delivering round bearing piles	15	2,326 20
9,920	"	" " square " "	16	1,587 20
22,886	"	Driving round or square " "	04	915 44
121,510.60	Pounds.	Wrought iron	13	15,796 38
28,087	"	Cast iron	07	1,966 09
17,590	"	Spikes and nails, wrought, pressed and cut	09	1,583 10
560	Feet.	Steel wire rope 5/8-in. diameter	25	140 00
2,100	Pounds.	Lead and antimony for securing iron work	50	1,050 00
1	Number.	Sulphur and sand cement " " "	100 00	100 00
1	"	Painting lock gates and fixtures above water	50 00	50 00
288	Lin. Feet.	Snubbing posts inserted	25	72 00
28	Number.	Composite values including insertion	18 00	504 00
		Total		$306,684 10

Received from H. G. Anderson, late Canal Commissioner, Two Hundred and Twenty-five Thousand One Hundred and Seventy-four Dollars ($225,174) and from Martin Kinéman, Canal Commissioner, Eighty-one Thousand Five Hundred and Ten 10-100 Dollars ($81,510 10) making in all Three Hundred and Six Thousand Six Hundred and Eighty-four 10-100 Dollars ($306,684 10), in full of the foregoing account, of work performed on contract, for the construction of a Lock and Dam at Copperas Creek for the improvement of the Illinois River (of which amount One Hundred and Eleven Thousand Four Hundred and One Dollars ($111,401) was paid to Willard Johnson the original contractor prior to his assignment of said contract to me) which amount is in full payment for all work done under said contract by Willard Johnson and myself. For this sum duplicate receipts have been signed.

(Signed) ARCHIBALD McARTHUR.

Dated at Lockport this 18th day of December, 1877.

No. 4.—Final estimate of work done by the United States on foundation.

Quantities.	Measure.	Items.	Contract price.	Amounts.	Aggregate.
1	Number	Grubbing and clearing	$3,000 00	$3,000 00	
1	"	Bailing and draining	3,000 00	3,000 00	
50,169	Cubic yards	Earth excavations	35	17,559 15	
1,278 45	"	Concrete in foundation	8 00	10,227 60	
55,465	Lineal feet	Bearing piles furnished and delivered	16	8,874 40	
43,484	"	Bearing piles driven and cut off	05	2,174 20	
412,980	Ft. B. M.	Timber in foundation	29 00	11,976 42	
32,116	"	Plank in foundation	33 00	1,059 83	
27,536	Pounds	Wrought iron	15	4,130 40	
3,569	"	Spikes and nails	10	356 90	
(Engineering and contingencies not included.)		Total by U. S.			$62,358 90

No. 5.—Work done on Foundation by State.

Quantities.	Measure.	Items.	Contract price.	Amounts.	
507 63	Cubic yards	Concrete	$8 00	$4.061 04	
69,260	Ft. B. M.	Timber	29 00	2,008 54	
106,915	"	Plank first floor	33 00	3,528 20	
5,797	Pounds	Wrought iron	15	869 55	
9,000	"	Spikes and nails	05	900 00	
		Total by State			$11,367 33
		Total cost			$73,726 23

Water Gauges at LaSalle in 1867, 1868, and April and May 1869.

Day.	1867.										1868.					1869.	
	Jan.	Feb.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	April.	May.	June.	Aug.	Sept.	April.	May.
	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.
1	8 10	3 7	.....	10 1	12 5	6 6	1 4	0 6	0 2	0 7	.....	7 9	8 5	0 7	0 3	16 3	12 10
2	8 6	3 8	.....	9 8	12 11	6 0	1 1	0 6	0 2	0 6	.....	8 0	8 8	0 6	0 3	16 3	12 7
3	7 11	3 8	.....	9 4	13 1	5 8	1 1	0 5	0 2	0 8	.....	8 5	9 0	0 5	0 4	16 3	12 1
4	7 5	3 8	.....	9 1	13 0	5 5	0 11	0 5	0 2	0 7	8 7	9 2	8 10	0 5	0 4	16 1	11 11
5	7 0	3 8	.....	9 8	12 10	5 2	0 10	0 6	0 3	0 6	8 7	10 0	8 11	0 5	0 4	15 7	11 9
6	6 6	3 9	.....	10 5	12 7	6 2	0 9	0 5	0 4	0 5	8 4	11 3	10 6	0 5	0 4	15 1	11 6
7	6 3	3 9	.....	10 8	12 2	6 2	0 8	0 6	0 4	0 6	8 2	14 1	11 2	0 7	0 4	14 5	11 1
8	6 1	3 9	.....	10 6	11 9	5 8	0 8	0 5	0 3	0 9	8 1	18 11	10 11	0 7	0 4	13 1	10 9
9	5 10	3 10	.....	10 3	11 0	5 2	0 8	0 5	0 6	0 8	7 9	19 1	9 11	0 6	0 7	12 7	10 4
10	5 8	3 11	13 1	10 1	10 11	5 0	0 7	0 4	0 6	0 7	7 7	18 3	9 4	0 4	0 10	12 1	9 10
11	5 5	4 0	14 4	9 7	11 0	4 10	0 7	0 5	0 5	0 9	7 4	17 8	8 11	0 4	0 10	13 1	9 7
12	5 3	4 1	16 1	9 1	11 0	4 3	0 7	0 4	0 5	0 6	7 5	16 11	8 6	0 5	1 1	14 4	10 4
13	4 11	.....	15 7	9 1	10 6	4 0	0 7	0 4	0 2	0 5	5 1	16 2	8 2	0 5	1 0	15 1	8 11
14	4 9	.....	15 1	9 4	10 4	3 8	0 7	0 3	0 0	0 8	8 10	15 3	7 11	0 5	0 8	15 11	10 7
15	4 9	.....	14 6	9 4	10 0	3 7	0 7	0 3	0 1	0 7	9 7	14 8	7 6	0 5	0 9	18 1	12 10
16	4 9	.....	14 4	9 1	9 8	3 2	0 6	0 4	0 1	0 8	10 11	14 1	7 1	0 5	0 11	18 9	14 9
17	4 7	.....	14 4	9 0	9 4	3 0	0 6	0 4	0 3	0 7	11 1	13 7	7 1	0 4	0 11	19 7	11 11
18	4 6	.....	14 4	8 9	9 1	2 9	0 6	0 3	0 3	0 7	10 7	13 2	7 1	0 5	0 10	20 1	11 4
19	4 4	.....	14 2	8 7	8 8	2 7	0 5	0 3	0 4	0 7	9 11	12 9	6 8	0 6	0 8	21 1	10 9
20	4 3	.....	13 11	8 2	8 4	2 6	0 6	0 4	0 4	0 7	9 7	12 2	6 6	0 6	0 9	20 9	10 5
21	4 2	.....	13 4	9 6	8 1	2 4	0 5	0 4	0 4	1 1	9 3	11 8	6 3	0 6	0 7	20 3	10 0
22	4 2	.....	12 10	11 10	7 9	2 2	0 3	0 3	0 4	1 3	8 11	11 3	5 11	0 5	0 10	19 7	9 7
23	4 2	.....	12 6	13 3	7 7	2 0	0 4	0 3	0 4	1 0	8 3	10 10	5 9	0 4	0 10	18 3	9 10
24	4 1	.....	12 5	12 11	7 11	1 11	0 3	0 2	0 4	0 10	8 0	10 4	5 6	0 3	0 11	17 7	9 4
25	4 1	.. ..	12 1	12 6	8 1	1 10	0 3	0 2	0 5	0 11	7 8	9 11	5 2	0 2	0 10	16 1	10 0
26	4 0	. .....	11 10	12 7	7 9	1 8	0 4	0 2	0 6	0 10	7 6	9 6	4 11	0 1	0 9	14 5	9 0
27	3 11	.....	11 5	12 7	7 6	1 7	0 4	0 3	0 6	0 10	7 3	9 7	4 7	0 1	0 10	13 9	8 10
28	3 9	.....	10 10	12 7	7 3	1 7	0 4	0 3	0 6	0 9	7 0	9 0	4 3	0 0	0 10	13 8	13 10
29	3 8	.....	10 7	12 8	7 1	1 4	0 4	0 3	0 6	.....	7 2	9 1	3 11	0 1	0 8	12 10	18 9
30	3 7	.....	10 4	12 6	6 10	1 2	0 5	0 3	0 6	.....	7 8	8 8	3 9	0 2	0 8	12 10	19 4
31	3 7	.....	....	12 6	.....	1 1	0 6	.....	0 6	.....	.....	8 5	.....	0 3	.....	.....	19 1

The rest of gauges for 1869 are printed in the report for 1870.

Water Gauges at LaSalle, Henry and Peoria from December, 1870.

Day.	December, 1870.						January, 1871.						February, 1871.						March, 1871.						April, 1871.					
	LaSalle.		Henry.	Peoria.			LaSalle.		Henry.	Peoria.			LaSalle.		Henry.	Peoria.			LaSalle.		Henry.	Peoria.			LaSalle.		Henry.	Peoria.		
	Ft.	In.	Feet.	Ft.	In.		Ft.	In.	Feet.	Ft.	I		Ft.	In.	Feet.	Ft.	In.		Ft.	In.	Feet.	Ft.	In.		Ft.	In.	Feet.	Ft.	In.	
1.....	1	1	1.2	1	2		0	6	1.	1	2		4	5	5.	5	1		16	3	15.25	14	4		10	4	11.5	13	6	
2.....	1	5	1.17	1	2				1.	1	2		4	4	5.	5	2		15	11	15.25	14	4		10	1	11.25	11	3	
3.....	1	4	1.15	1	2		0	6	1.	1	2		5	1	5.5	5	3		15	9	15.15	14	4		9	9	11.	11		
4.....	1	6	1.25	1	2		0	5	1.	1	1		5	7	6.03	5	4		16	5	15.15	14	4		9	7	10.75	10	5	
5.....	1	7	1.2	1	1		0	4	0.95	1			5	8	6.05	5	5		16	4	15.2	14	4		9		10.4	10	4	
6.....	1	3	1.15	1	2		0	3	0.9	1			6		6.07	5	6		16	3	15.2	14	4		8	9	10.15	10	1	
7.....	1	4	1.2	1	2				0.8	1			6	5	6.12	5	7		16	1	15.08	14	3		8	5	9.8	9	7	
8.....	1	5	1.25	1	3				0.75	0	9		6	10	6.2	5	8		15	9	14.75	14			8	4	9.7	9	4	
9	1	9	1.25	1	4				0.7	0	9		7	4	6.4	5	8		15	1	15.	13	9		8	2	9.4	9	4	
10.....	2	1	1.27	1	3				0.65	0	9		6	10	6.28	5	8		15	11	15.	14	2				9.15	9	4	
11.....	2	1	1.25	1	3		0	5	0.67	0	9		6	5	6.25	5	8		15	10	15.2	14	5				9.4	9	5	
12.....			1.25	1	3		0	11	0.8	0	9		6	1	6.25	6			16	3	15.25	14	6				9.48	9	6	
13.....			1.3	1	3		1	1	1.	0	9		6	1	6.35	6	3		16	5	15.3	14	7				9.75	9	6	
14.....			1.3	1	3		2	3	1.2	0	9		6	1	6.25	6	2		16	1	15.35	14	8				9.8	9	6	
15.....			1.3	1	3		3	2	1.15	1	3		6	3	6.15	6	1		15	9	15.4	14	8				9.7	9	5	
16.....			1.25	1	3		5		1.1	1	6		6	3	6.	5	80		17	7	16.	14	8				9.5	9	4	
17.....			1.35	1	3		6	10	1.6	2			6	3	6.	5	7		18	9	16.5	15	2				9.35	9	3	
18.....			1.47	1	3		7	11	3.	2	5		6	4	5.85	5	7		18	9	16.7	15	6				9.2	9	2	
19.....			1.25	1	3		8	9	4.6	3	1		6	1	5.75	5	9		18		16.5	15	8				9.1	9		
20.....			1.20	1	3		9	3	5.6	4			6	2	5.75	6	1		17	7	16.5	15	7		7	5	8.9	8	7	
21.....			1.18	1	3		9	1	6.4	4	3		7	11	6.	6	4		16	1	16.1	15	3		6	10	8.6	8	5	
22.....			1.15	1	3		8	5	6.34	4	8		8	5	6.53	6	7		15	7	15.6	14	8		6	5	8.3	8	3	
23.....			1.20	1	3		7	7	6.34	5	2		9	1	7.	7	2		14	3	15.1	14	6		6	8	8.0	8	1	
24.....			1.30	1	2		6	5	6.2	5	6		15	3	8.4	7	6		13	9	14.6	14	2		6	5	7.8	7	9	
25.....	1	5	1.25	1	2		5	9	6.	5	8		19	1	13.	9	3		12	5	14.1	13	8		6	1	7.55	7	6	
26.....	1	3	1.2	1	2		4	5	5.8	5	6		19	1	14.3	11	1		12	2	13.7	13	6		5	8	7.28	7	4	
27.....	1	1	1.15	1	2		4	3	5.6	5	4		17	1	15.3	12	9		12	2	13.3	13	1		5	8	7.15	7	2	
28.....	1	1	1.1	1	1		4	5	5.5	5	1		16	5	15.25	13	8		12		12.8	12	7		5	8	6.87	7		
29.....	0	9	1.05	1			4	11	5.25	4	7								11	5	12.5	12	3		5	4	6.6	6	8	
30.....	0	6	1.05	1	1		4	7	5.03	4	9								11		12.15	12			4	11	6.3	6	5	
31.....	0	6	1.	1	2		5	7	5.	5									10	6	11.8	11	8							

Water Gauges at LaSalle, Henry and Peoria.

Day.	May, 1871.			June, 1871.			July, 1871.			August, 1871.			September, 1871.		
	LaSalle.		Henry.	Peoria.	LaSalle.		Henry.	Peoria.	LaSa e.		Henry.	Peoria.	LaSalle.		Henry.	Peoria.	LaSalle.		Henry.	Peoria.
	Ft.	in.	Feet.	Feet.	Ft.	in.	Feet.	Feet.	Ft.	in.	Feet.	Feet.	Ft.	in.	Feet.	Feet.	Ft.	in.	Feet.	Feet.
1	4	7	6.03	6.2	1	9	2.25	2.4	1	6	1.6	1.6	0	11	0.4	0.5	0	10	0.05	0.1
2	4	5	5.75	6.	1	8	2.15	2.3	1	7	1.6	1.8	0	9	0.35	0.5	0	7	0.1	0.1
3	4	4	5.55	5.8	2	2	2.22	2.4	1	1	1.6	1.9	0	10	0.4	0.5	0	6	.....	0.1
4	4	1	5.25	5.6	1	11	2.18	2.4	1	5	1.6	1.8	1		0.7	0.6	0	7	0.05—	0.1
5	4	1	5.1	5.5	1	11	2.15	2.4	1	4	1.6	1.6	1		0.7	0.8	0	8	0.07—	0.1
6	4	7	5.	5.4	2		2.2	2.4	1	7	1.6	1.5	1	1	0.7	0.8	0	7	0.2—	0.1
7	4	7	5.03	5.2	2	7	2.35	2.3	1	4	1.55	1.5	1	2	0.7	0.8	0	1	0.2—	0.1
8	4	8	5.06	5.	2	7	2.35	2.3	1	5	1.55	1.5	1	4	0.85	0.8	0	6	0.25—	.....
9	4	5	4.85	5.	2	3	2.4	2.3	1	2	1.4	1.5	1	1	0.7	0.8	0	7	0.35—	.....
10	4	5	4.	4.9	2	3	2.3	2.3	1	2	1.3	1.5	1	1	0.7	0.8	0	6	0.45—	.....
11	4	3	4.75	4.8	2	1	2.25	2.3	1	2	1.25	1,4	1		0.6	0.8	0	3	0.35—	.....
12	4	0	4.6	4.7	2	1	2.18	2.3	1	1	1.25	1.3	0	10	0.55	0.8	0	8	0.35—	.....
13	3	10	4.4	4.6	1	9	2.1	2.3	1		1.2	1.2	0	10	0.5	0.7	0	7	0.35—	.....
14	3	7	4.3	4.4	1	3	1.9	2.2	0	11	1.15	1.1	0	11	0.45	0.7	0	5	0.45—	.....
15	3	4	4.1	4.2	1	3	1.7	2.1	0	9	1.15	1.1	0	10	0.4	0.7	0	6	*B'l w Lock	Ab ve Lock	0.1—
16	3	3	3.95	4.	1	3	1.53	2	0	9	1.	1.1	0	9	0.15	0.6	0	3			0.1—
17	3	2	3.73	3.8	1	5	1.45	1.9	0	8	0.85	1.1	0	9	0..25	0.6	0	1			0.1—
18	3	0	3.6	3.7	1	4	1.45	1.8	0	11	0.75	1.	0	3	0.2	0.5	0	5	0.71	0.3—	0.1—
19	2	9	3.53	3.5	1	4	1.45	1.7	0	11	0.65	1.	0	9	0.15	0.4	0	8	1.15	0.5—	0.1—
20	2	8	3.4	3.2	1	8	1.47	1.6	0	10	0.75	0.9	0	7	0.07	0.3	0	9	1.5	0.5—	0.1—
21	2	8	3.2	3.1	1	11	1.6	1.5	0	9	0.7	0.8	0	5	.....	0.2	0	8	1.6	0.45—	0.1—
22	2	4	2.95	3.	2	1	1.75	1.5	0	11	0.7	0.8	0	3	0.05—	0.2	0	10	1.75	0.3—	0.1—
23	2	3	2.8	2.9	2		1.85	1.5	0	11	0.6	0.8	0	5	0.1—	0.2	0	11	1.85	0.2—	0.2—
24	2	1	2.68	2.8	1	10	1.85	1.9	0	10	0.6	0.7	0	5	0.15—	0.2	0	9	1.9	0.25—	0.2—
25	2	2	2.7	2.7	1	8	1.8	1.9	1		0.6	0.7	0	9	0.15—	0.2	0	8	1.8	0.3—	0.2—
26	2	3	2.65	2.7	1	6	1.7	1.9	1		0.6	0.7	0	6	0.12—	0.1	0	10	1.85	0.35—	0.3—
27	2	4	2.7	2.7	1	6	1.75	1.9	0	10	0.45	0.6	0	4	0.07—	0.1	0	10	1.85	0.35—	0.3—
28	2	4	2.65	2.6	1	8	1.6	1.8	0	9	0.4	0.6	0	6	0.05—	0.1	1		2.	0.4—	0.3—
29	2	1	2.6	2.5	1	8	1.65	1.7	0	7	0.4	0.5	0	11	0.05—	0.1	0	11	2.	0.35—	0.3—
30	2	0	2.5	2.5	1	7	1.6	1.6	0	11	0.4	0.5	1	1	0.05—	0.1	0	11	2.1	0.3—	0.3—
31	1	10	2.4	2.6	.....		.....	.....	0	10	0.4	0.5	1		.....	0.1	.....		.....	.....	.....

* Water raised by dam.

Water Gauges at LaSalle, Henry and Peoria.

Day.	October, 1871.					November, 1871.					December, 1871.					January, 1872.					February, 1872.				
	LaSalle		Henry.		Peoria.	LaSalle		Henry.		Peoria.	LaSalle		Henry.		Peoria.	LaSalle		Henry.		Peoria.	LaSalle		Henry.		Peoria.
			Above lock.	Below lock.				Above lock.	Below lock.				Above lock.	Below lock.				Above lock	Below lock.				Above lock.	Below lock.	
	Ft.	In.	Feet.	Feet.	Feet.	Ft.	In.	Feet.	Feet.	Feet.	Ft.	In.	Feet.	Feet.	Feet.	Ft.	In.	Feet.	Feet.	Feet.	Ft.	In.	Feet.	Feet.	Feet.
1	0	10	2	0.3—	.....	4	7	6.6	0.95—	.....	4	8	6.8	0.3	.....	5	5	0.6	3.55	.....	.....		0.65	0.95	.....
2	0	11	2	0.3—	.....	4	9	6.75	0.65—	.....	4	7	6.8	0.25	.....	5	4	0.5	3.42	.....	.....		0.55	0.85	.....
3	0	11	2.04	0.25—	.....	4	9	6.75	0.5—	.....	4	8	6.75	0.25	.....	5	3	0.55	3.32	.....	.....		0.45	0.85	.....
4	1		2.12	0.3—	.....	4	9	6.8	0.3—	.....	4	7	6.75	0.25	.....	5	3	0.45	3.08	.....	.....		0.45	0.85	.....
5	0	10	2.14	0.15—	.....	4	9	6.8	0.25—	.....	4	7	6.75	0.2	.....	5	2	0.45	2.9	.....	.....		0.45	0.85	.....
6	0	11	2.25	0.35—	.....	4	7	6.75	0 25—	.....	4	7	6.75	0.25	.....	5	1	0.45	2.75	.....	.....		0.45	0.8	.....
7	0	11	2.2	0.3—	.....	4	7	6.75	0.2—	.....	4	7	.....	0.1	.....	5	1	0.4	2.6	.....	.....		0.4	0.8	.....
8	0	11	2.1	0.1—	.....	4	7	6.8	0.15—	.....	4	7	.....	0.1	.....	5		0.4	2.45	.....	.....		0.4	0.75	.....
9	1		2.04	0.0—	.....	4	8	6.9	0.0	.....	4	7	.....	0.1	.....	5		0.4	2.25	.....	.....		0.4	0.75	.....
10	1	3	2.2	0.2—	.....	4	11	7.	0.05	.....	4	7	.....	0.05	.....	.....		0.35	2.1	.....	.....		0.35	0.75	.....
11	1	1	2.45	0.25—	.....	4	10	7.	0.25	.....	4	7	.....	0.00	.....	.....		0.35	2.1	.....	.....		0.35	0.7	.....
12	1		2.4	0.2—	.....	4	10	7.	0.3	.....	4	7	.....	0.05	.....	.....		0.35	2.	.....	.....		0.35	0.65	.....
13	1	1	2.45	0.15—	.....	4	10	6.95	0.45	.....	4	7	.....	0.00	.....	.....		0.35	1.85	.....	.....		0.35	0.65	.....
14	1	2	2.55	0.04—	.....	4	11	7.05	0.4	.....	4	7	.....	0.00	.....	.....		0.35	1.75	.....	.....		0.35	0.65	.....
15	1	4	2.6	0.05—	.....	4	11	7.	0.4	.....	4	7	.....	0.00	.....	.....		0.35	1.7	.....	.....		0.35	1.05	.....
16	1	5	2.6	0.00—	.....	4	11	7.	0.55	.....	4	7	.....	0.00	.....	.....		0.35	1.7	.....	.....		0.35	1.05	.....
17	1	4	2.65	0 00—	.....	4	11	7.	0.6	.....	4	7	.....	0.05	.....	.....		0.35	1.65	.....	.....		0.35	1.10	.....
18	1	4	2.75	0.1—	.....	4	10	7.05	0.65	.....	4	7	.....	0.05	.....	.....		0.35	1.6	.....	.....		0.35	1.15	.....
19	1	4	*2.95	0.15—	.....	4	10	6.95	1.	.....	4	7	.....	0.05	.....	.....		0.3	1.55	.....	.....		0.35	1.25	.....
20	1	7	3.3	0.5—	.....	5	2	7.	0.8	.....	4	6	.....	0.05	.....	.....		0.25	1.5	.....	.....		0.3	1.3	.....
21	2		3.8	0.55—	.....	5	1	7.	0.75	.....	4	6	.....	0.05	.....	.....		0.25	1.5	.....	.....		0.35	1.35	.....
22	2	4	4.2	0.6—	.....	4	11	7.05	0.7	.....	4	11	.....	0,12	.....	.....		0.25	1.45	.....	.....		0.45	1.4	.....
23	2	6	4.5	0.85—	.....	4	10	6.95	0.7	.....	5	1	.....	0.1	.....	.....		0.25	1.35	.....	.....		0.5	1.6	.....
24	2	10	4.82	0.95—	.....	4	9	6.85	0.65	.....	5	5	.....	1.1	.....	.....		0.2	1.2	.....	.....		0.6	1.8	.....
25	3	1	5.05	1.1—	.....	4	8	6.85	0.4	.....	7	3	†1.26	2.95	.....	.....		0.15	1.15	.....	.....		0.8	2.05	.....
26	3	5	5.28	0.9—	.....	4	8	6.9	0.4	.....	6	11	1.4	3.7	.....	.....		0.15	1.15	.....	.....		1.	2.3	.....
27	3	9	5.6	1.1—	.....	4	8	6.9	0.25	.....	6		1.24	4.15	.....	.....		0.1	1.1	.....	.....		1.05	2.6	.....
28	4	1	5.98	1.21—	.....	4	7	6.8	0.25	.....	5	10	1.04	4.2	.....	.....		0.1	1.05	.....	.....		1.05	2.8	.....
29	4	1	6.25	1.18—	.....	4	8	6.8	0.20	.....	5	7	0.9	4.12	.....	.....		0.1	1.	.....	.....		1.1	3.	.....
30	4	6	6.4	1.15—	.....	4	9	6.8	0.25	.....	5	7	0.75	3.95	.....	.....		0.5	1.	.....	.....		.....	.....	.....
31	4	7	6.55	1.15—	.....	.....		.....	.....	.....	5	6	0.70	3.75	.....	.....		0.5	1.	.....	.....		.....	.....	.....

*Henry dam closed. †On the 25th of Dec., 1871, a gauge was set for low water mark of 1871, below lock, which was 0.50 lower than 1867 and 1868, and 5 feet above lower miter sill. The gauge above lock was set 7 feet higher, being 6 feet above upper miter sill and 0.50 above top of dam.

NOTE.—All gauges prior to Dec. 31, 1861, were taken in reference to low water of 1867 and 1868, after that to low water of 1871. Dam at Henry raised water at LaSalle 4.4 at low water.

Water Gauges at LaSalle, Henry and Peoria.

Day.	March, 1872.				April, 1872.				May, 1872.				June, 1872.				July, 1872.			
	LaSalle	Henry.		Peoria.	LaSalle	Henry.		Peoria.	LaSalle	Henry.		Peoria.	LaSalle	Henry.		Peoria.	LaSalle	Henry.		Peoria.
		Above Lock.	Below Lock.			Above Lock.	Below Lock.			Above Lock.	Below Lock.			Above Lock.	Below Lock.			Above Lock.	Below Lock.	
	Ft. In.	Feet.	Feet.		Ft. In.	Feet.	Feet.		Ft. In.	Feet.	Feet.		Ft. In.	Feet.	Feet.		Ft. In.	Feet.	Feet.	
1		1.1	3.1		7 1	1.8	4.6		6 2	1.2	5.25		5 1	0.55	2.5		4 9	0.35	2.2	
2		1.	3.2		7 1	2.05	5.15		6 2	1.2	5.2		5 1	0.6	3.		4 9	0.3	2.	
3		0.95	3.35		7 1	2.1	5.4		6 1	1.15	5.2		5 3	0.65	3.2		4 9	0.25	1.95	
4		0.9	3.35		7 7	2.1	5.75		6 8	1.	5.		5 2	0.65	3.5		4 9	0.25	1.85	
5		0.85	3.3		7 7	2.1	6.		6 8	1.	5.		5 1	0.65	3.6		4 8	0.25	1.7	
6		0.8	3.		7 8	2.	6.15		6 7	1.	4.5		5 1	0.5	3.65		4 7	0.25	1.5	
7		0.8	2.85		7 11	2.1	6.45		6 7	1.	4.4		6	1.	6.		4 6	0.25	1.2	
8		0.7	2.8		7 11	2.1	6.55		6 6	1.	4.2		6 5	1.5	7.5		4 6	0.1	1.1	
9		0.5	2.6		7 10	2.1	6.75		5 3	0.95	4.		7 4	1.9	8.		4 6		1.	
10		0.45	2.5		7 10	2.	6.8		5 2	0.85	3.8		7 1	1.9	8.2		4 6		0.9	
11		0.65	2.4		7 8	2.	7.		5 5	0.8	3.75		6 8	1.9	8.3		4 6		0.85	
12		0.7	2.6		8 1	1.95	7.05		5 3	0.75	3.50		6 3	1.5	8.2		4 6		0.75	
13		0.75	2.65		7 8	1.85	6.9		5 4	0.75	3.2		5 11	1.2	7.9		4 6		0.7	
14		0.85	2.55		7 1	1.8	6.75		5 4	0.75	3.1		5 8	1.1	7.6		4 6		0.65	
15		0.85	2.6		6 11	1.75	6.75		5 4	0.75	3 15		5 3	1.	7.3		4 6		0.9	
16		0.85	2.85		7	1.75	6.75		5 4	0.75	3.15		5 3	0.8	6.8		4 6		0.55	
17		0.9	2.85		7 2	1.75	6.75		5 5	0.85	3.15		5 2	0.6	6.5		4 6		0.5	
18		0.9	3.		7	1.75	6.6		5 8	1.	3.2		5	0.6	6.		4 6	0.05	0.5	
19		0.9	3.		7	1.7	6.5		6	1.1	3.3		5	0.6	5.8		4 6	0.05	0.55	
20		0.9	2.85		6 11	1.6	6.45		6 1	1.15	3.5		4 10	0.5	5.4		4 6	0.05	0.6	
21		0.9	2.8		7 1	1.6	6.4		5 8	1.15	3.6		4 10	0.5	5.		4 6	0.05	0.6	
22		0.9	2.75		6 11	1.55	6.4		5 9	1.1	3.7		4 9	0.4	4.5		4 7	0.05	0.6	
23		0.85	2.75		6 9	1.5	6.35		5 8	1.	3.6		4 9	0.45	4.		4 7	0.1	1.	
24		0.95	2.6		6 8	1.4	6.2		5 8	0.9	3.65		4 9	0.5	3.8		4 7	0.1	1.15	
25		0.95	2.6		6 6	1.35	6.		5 7	0.8	3.6		4 9	0.5	3.5		4 7	0.1	1.2	
26		0.95	2.6		6 3	1.25	5.8		5 7	0.8	3.6		4 9	0.5	3.2		4 7	0.1	1.2	
27		0.95	2.65		6 1	1.2	5.5		5 5	0.75	3.5		4 9	0.5	2.8		4 6	0.05	1.2	
28		1.	2.75		6 1	1.2	5.45		5 3	0.7	3.3		4 9	0.45	2.75		4 6	0.05	1.15	
29		1.1	2.8		6 1	1.2	5.45		5 3	0.7	3.2		4 9	0.4	2.5		4 6	0.05	1.1	
30		1.2	2.85		6 1	1.2	5.35		5 1	0.7	2.9		4 9	0.35	2.4		4 6	0.05	1.1	
31		1.5	3.75						5 1	0.65	2.8		4 9				4 6	0.1	1.2	

Water Gauges at LaSalle, Henry and Peoria.

Day.	August, 1872.				September, 1872.				October, 1872.				November, 1872.				December, 1872.			
	LaSalle	Henry.		Peoria.	LaSalle	Henry.		Peoria.	LaSalle	Henry.		Peoria.	LaSalle	Henry.		Peoria.	LaSalle	Henry.		Peoria.
		Above lock.	Below lock.			Above lock.	Below lock.			Above lock.	Below lock.			Above lock.	Below lock.			Above lock.	Below lock.	
	Ft. In.	Feet.	Feet.	Feet.	Ft. In.	Feet.	Feet.	Feet.	Ft. In.	Feet.	Feet.	Feet.	Ft. In.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.
1	*4 8	0.1	1.35	.....	.....	0.1	1.35	.....	5 4	0.7	2.4	.....	4 7	0.15	1.4	.....	4.7	0.1	1.6	.....
2	4 7	0.1	1.3	.....	.....	0.1	1.3	.....	5 3	0.75	2.7	.....	4 7	0.15	1.35	.....	4.7	0.05	1.6	.....
3	4 7	0.05	1.2	.....	.....	0.05	1.2	.....	5 2	0.75	2.75	.....	4 7	0.1	1.3	.....	4.7	0.05	1.6	.....
4	4 7	0.05	1.5	.....	.....	0.05	1.15	.....	5 2	0.75	2.75	.....	4 9	0.1	1.3	.....	4.7	0.05	1.55	.....
5	4 6	0.05	1.	.....	.....	0.05	1.05	.....	5 2	0.75	2.8	.....	4 11	0.2	1.5	.....	4.7	0.05	1.5	.....
6	4 7	0.00	0.95	.....	.....	0.05	1.	.....	5 5	0.8	2.85	.....	4 11	0.4	1.75	.....	4.6	0.05	1.5	.....
7	4 6	0.00	0.9	.....	.....	0.0	0.95	.....	5 5	0.85	3.	.....	4 11	0.4	1.8	.....	4.6	0.0	1.4	.....
8	4 6	0.0	0.85	.....	4 10	0.0	0.9	.....	5 5	0.8	3.15	.....	4 11	0.4	1.85	.....	4.6	0.0	1.3	.....
9	4 6	0.0	0.8	.....	5 11	0.0	0.85	.....	5 5	0.75	3.3	.....	4 11	0.4	1 9	.....	4.5	0.0	1.2	.....
10	4 6	0.0	0.8	.....	5 11	0.0	0.8	.....	5 4	0.7	3.2	.....	4 10	0.3	1.9	.....	4.5	0.0	1.1	.....
11	4 5	0.0	0.8	.....	6 0	0.0	0.8	.....	5 2	0.6	3.	.....	4 9	0.25	2.	.....	4.5	0.0	1.1	.....
12	4 5	0.00	0.8	.....	5 9	0.0	0.8	.....	5 2	0.6	2.9	.....	4 9	0.25	2.	.....	4.5	0.0	1.	.....
13	4 6	0.05	1.0	.....	5 6	0.0	1.	.....	5 2	0.6	2.65	.....	4 9	0.25	2.	.....	4.5	0.0	1.	.....
14	4 6	0.1	1.1	.....	5 3	0.1	1.1	.....	5 1	0.55	2.6	.....	4 8	0.25	2.	.....	4.5	0.0	1.	.....
15	4 6	0.10	1.00	.....	5 2	0.1	1.	.....	4 10	0.5	2 5	.....	4 8	0.2	1.95	.....	4.5	0.0	0.95	.....
16	4 5	0.05	0.95	.....	5 1	0.05	0.95	.....	4 10	0.5	2.35	.....	4 8	0.2	1.8	.....	4.5	0.0	0.95	.....
17	4 7	0.05	0.95	.....	4 11	0.05	0.95	.....	5 0	0.5	2.3	.....	4 7	0.2	1.8	.....	4.5	0.0	0.9	.....
18	4 6	0.1	0.95	.....	4 11	0.1	0.95	.....	4 11	0.5	2.25	.....	4 7	0.2	1.75	.....	4.5	0.0	0.9	.....
19	4 11	0.1	0.95	.....	4 9	0.1	0.95	.....	4 11	0.45	2.2	.....	4 7	0.15	1.75	.....	4.5	0.0	0.9	.....
20	4 11	0.4	1.35	.....	4 8	0.4	1.35	.....	4 10	0.35	2.13	.....	4 7	0.15	1.75	.....	.....	0.0	0.85	.....
21	4 10	0.4	1.4	.....	4 8	0.4	1.4	.....	4 9	0.3	2.1	.....	4 7	0.15	1.7	.....	.....	0.0	0.85	.....
22	4 8	0.3	1.4	.....	4 8	0.3	1.4	.....	4 9	0.3	2.	.....	4 7	0.15	1.7	.....	.....	0.0	0.85	.....
23	4 8	0.2	1.25	.....	4 9	0.2	1.25	.....	4 9	0.25	1.95	.....	4 7	0.15	1.7	.....	.....	0.0	0.8	.....
24	4 8	0.15	1.2	.....	4 11	0.15	1.2	.....	4 9	0.25	1.75	.....	4 7	0.1	1.65	.....	.....	0.0	0.8	.....
25	4 6	0.15	1.15	.....	4 11	0.15	1.15	.....	4 8	0.25	1.55	.....	4 7	0.1	1.65	.....	.....	0.0	0.8	.....
26	4 6	0.1	1.1	.....	4 11	0.1	1.1	.....	4 8	0.25	1.50	.....	4 7	0.1	1.65	.....	.....	0.0	0.75	.....
27	4 5	0.1	1.05	.....	4 10	0.1	1.05	.....	4 8	0.2	1.45	.....	4 7	0.1	1.65	.....	.....	0.0	0.75	.....
28	4 10	0.15	1.05	.....	4 9	0.15	1.05	.....	4 7	0.20	1.4	.....	4 7	0.1	1.65	.....	.....	0.0	0.7	.....
29	5 1	0.6	1.4	.....	5 1	0.6	1.4	.....	4 7	0.15	1.4	.....	4 6	0.1	1.6	.....	.....	0.0	0.7	.....
30	5 1	0.6	1.5	.....	5 2	0.6	1.5	.....	4 7	0.15	1.4	.....	4 6	0.1	1.6	.....	.....	0.0	0.7	.....
31	5 0	0.6	1.45	.....	.....	.....	.....	.....	4 7	0.15	1.4	.....	.....	.....	.....	.....	.....	0.0	0.65	.....

*Dam raised water 4 feet 4 inches at LaSalle. Deduct this from Gauge, gives the amount above low water.

Water Gauges at LaSalle, Henry and Peoria.

Day.	January, 1873.				February, 1873.				March, 1873.				April, 1873.				May, 1873.			
	LaSalle	Henry.		Peoria.	LaSalle	Henry.		Peoria.	LaSalle	Henry.		Peoria.	LaSalle	Henry.		Peoria.	LaSalle	Henry.		Peoria.
		Above Lock.	Below Lock.			Above Lock.	Below Lock.			Above Lock.	Below Lock.			Above Lock,	Below Lock.			Above Lock.	Below Lock.	
	Ft. in.	Feet.	Feet.	Ft.in.	Ft. in.	Feet.	Feet.	Ft.in.	Ft. in.	Feet.	Feet.	Ft.in.	Ft. in.	Feet.	Feet.	Ft.in.	Ft. in.	Feet.	Feet.	Ft.in.
1		0.0	0.65			1.55	6.6			5.25	11.25			4.	10.8		11 1	5.7	12.1	11 4
2		0.5	1.5			1.	6.			5.	11.			4.2	11.		11 7	5.5	12.	11 3
3		0.5	1.5			0.75	5.5	5 8	5 1	4.75	10.65		5 1	4.5	11.25		13 7	6.	12.5	
4		0.5	1.6			0.5	5.2		7 1	4.1	10.		7 1	5.	11.4		13 4	5.9	12.6	
5		0.5	1.6			0.4	5.	5 1	9 1	3.6	9.4		9 1	5.5	12.		12 4	5.6	12.6	
6		0.5	1.75			0.4	4.75	4 11	12 1	3.	9.4		12 1	5.6	12.5		11 10	5.2	12.5	11 6
7		0.5	1.85			0.3	4.75	4 9	14 9	3.	9.2		13 9	6.8	13.3	12	11 4	5.	12.2	
8		0.4	1.85			0.3	4.75			3.5	9.75			7.2	14.		10 11	4.9	12.	
9		0.4	1.85			0.2	4.65			4.	10.5			8.25	15.2	13 4	11 7	4.8	11.9	11 2
10		0.4	1.85			0.2	4.65			4.8	11.			9.7	16.2	13 4	12 3	5.2	11.7	11 2
11		0.3	1.75			0.15	4.55			5.	11.5			10.25	17.	14 7	12 9	5.5	12.	11
12	4 5	0.3	1.85			0.15	4.55			5.5	12.			10.5	17.25	15 1	13 1	5.6	12.4	11 1
13	5	0.6	2.5	2 2		0.1	4.5			5.5	12.2			10.25	17.	15 5	12 11	5.5	12.6	
14	5 1	1.	3.1	3 2		0.1	4.5	4 11		5.6	12.3			10.	16.75	15 5	11 8	5.5	12.5	
15	6 1	1.5	5.2	4 7		0.1	4.5	5 1		5.7	12.4			9.5	16.5	15 3	11 1	5.2	12.2	
16	9 1	2.6	7.	6 2		0.2	4.75	5 3	16 1	5.8	12.5	11 7	16 1	9.2	16.2		10 9	5.	12.	11 2
17	12 7	3.	8.45	7 2	5 1	0.25	5.1	5 10	15 9	5.8	12.5		15 9	9.	16.	15	10 2	4.6	11.6	10 9
18	11 9	3.5	9.5	7 10	7 1	0.35	5.75	6 4	14 11	5.8	12.5		14 11	8.5	15.75	14 4	9 9	4.3	11.3	10 7
19	10 4	3.6	9.75	8 6	10 1	0.5	6.2	7 2	14 9	5.7	12.4	11 5	14 9	8.25	15.5		9 5	4.	11.	10 4
20	10 1	3.6	10.	8 10	13 1	0.7	6.85		14 9	5.6	12.4		14 9	8.2	15.25	14 1	9 6	3.9	10.9	10 2
21		4.	10.	8 11	15 7	0.9	7.3	8 10	14 9	5.3	12.2		14 9	7.8	15.2		9 5	3.8	10.8	10
22		3.9	9.95	8 10	14 1	1.2	7.9		14 3	5.3	12.2		14 9	7.6	14.8		9 3	3.7	10.7	9 9
23		3.75	9.7	8 9	13 1	1.5	8.4	10 4	13 9	5.	11.8		13 9	7.3	14.5		10 8	4.	10.8	
24		3.6	9.4	8 8	12 1	2.1	9.1	11	13 4	4.8	11.6		13 4	7.2	14.2	13 3	11 3	4.6	11.	10 1
25		3.2	9.15	8 6		3.75	10.1		13 1	4.65	11.3		13 1	7.	14.	13	12	4.3	11.2	
26		2.9	8.75	8 4		4.75	10.65	11 3	12 9	4.5	11.4		12 9	6.8	13.7	12 8	11 6	4.6	11.2	10 3
27		2.5	8.5	7 11		5.5	11.2		12 1	4.25	11.1		12 1	6.5	13.3	12 5	11 3	3.9	11.2	
28		2.25	8.2	7 10		5.5	11.5		11 7	4.	10.8		11 7	6.25	13.	12 3	11 2	3.8	11.	10 2
29		2.	7.	7 5					11 3	3.8	10.7		11 3	6.2	12.7	12	10	3.7	11.	
30		1.8	6.9	7 2					10 11	3.8	10.6		10 11	5.8	12.3		9 6	3.8	10.8	
31		1.65	6.75	6 6						3.7	10.5						9 2	3.6	10.6	

Water Gauges at LaSalle, Henry, Peoria and Copperas Creek.

Day.	June, 1873.				July, 1873.				August, 1873.				September, 1873.					October, 1873.			
	LaSalle...	Henry.		Peoria.....	LaSalle...	Henry.		Peoria.....	La Salle...	Henry.		Peoria.....	LaSalle....	Henry.		Peoria.....	Copperas Creek...	LaSalle...	Henry.		Peoria.....	Copperas Creek...
		Above lock.	Below lock.			Above lock.	Below lock.			Above lock.	Below lock.			Above lock.	Below lock.				Abo'e lock.	Below lock.		
	Ft.In.	Feet.	Feet.	Ft.In.	Ft.In.	Feet.	Feet.	Ft.In.	Ft.In.	Feet.	Feet.	Ft.In.	Ft.In.	Feet.	Feet.	Ft.In.	Feet	Ft.In.	Feet.	Feet.	Ft.In.	Feet.
1	9	3.4	10.4	9 8	4 10	0.3	2.3	1 6	4 11	0.15	1.7	.....	4 6	00	0.5	00	0.2	4 8	00	00	.....	0.5
2	8 8	3.2	10.2	9 6	4 10	0.3	2.2	1 6	4 11	0.15	1.6	.....	4 6	00	0.5	.....	0.2	4 8	00	00	.....	0.5
3	8 4	3.	10.	9 3	4 11	0.4	2.1	1 7	4 10	0.15	1.5	.....	4 6	00	0.4	.....	0.2	4 8	00	00	0 7	0.5
4	8 1	2.8	9.8	9 1	5 5	0.5	2.4	1 9	4 9	0.15	1.5	1 3	4 6	00	0.4	.....	0.3	4 8	00	0.1	0 9	0.6
5	7 10	2.6	9.6	8 9	5 8	1.	3.	1 10	4 9	0.1	1.5	1 2	4 7	00	0.4	.....	0.3	4 8	00	0.1	.....	0.6
6	7 4	2.3	9.3	8 7	7 1	1.5	3.5	2 3	4 8	0.1	1.5	1	4 7	00	0.4	.....	0.3	4 8	00	0.2	0 9	0.6
7	6 10	2.	9.	8 4	7 7	1.75	4.2	2 10	4 8	0.1	1.4	0 11	4 7	00	0.4	.....	0.3	4 8	00	0.2	0 8	0.7
8	6 6	1.8	8.8	8	7 2	1.8	4.8	3 8	4 7	0.1	1.4	.....	4 7	00	0.4	.....	0.3	4 8	00	0.2	.....	0.6
9	6 3	1.6	8.6	7 7	6 11	1.6	5.2	4 2	4 7	0.1	1.2	.....	4 7	00	0.4	0 1—	0.2	4 8	00	0.2	.....	0.7
10	6 3	1.3	8.3	7 4	6 6	1.4	5.2	4 6	4 7	00	1.2	0 10	4 7	00	0.3	.....	0.2	4 8	00	0.3	0 8	0.7
11	6 2	1.2	8.15	7 1	6 5	1.2	5.3	4 6	4 7	00	1.1	0 9	4 7	00	0.3	.....	0.2	4 8	00	0.3	0 9	0.7
12	6	1.1	8.	6 8	6 1	1.	5.2	4 5	4 7	00	1.1	.....	4 6	00	0.3	.....	0.2	4 8	00	0.3	0 9	0.7
13	5 10	1.	7.7	6 5	7	1.	5.	4 5	4 6	00	1.1	.....	4 6	00	0.3	.....	0.2	4 8	00	0.3	.....	0.6
14	5 8	0.9	7.3	6 1	6 11	0.9	4.9	4 2	4 6	00	1.1	.....	4 6	00	0.3	.....	0.3	4 8	00	0.3	.....	0.6
15	5 6	0.8	6.	5 9	6 7	0.8	4.8	4 1	4 6	00	1.	0 6	4 6	00	0.3	.....	0.1	4 8	00	0.4	.....	0.6
16	5 5	0.7	5.8	.....	5 7	0.7	4 7	3 95	4 6	00	1.	.....	4 6	00	0.3	.....	0.1	4 8	00	0.4	.....	0.7
17	5 3	0.6	5.5	5 2	5 8	0.6	4.6	3 8	4 5	00	1.	.....	4 6	00	0.3	.....	0.2	4 8	00	0.4	0 10	0.8
18	5 3	0.6	5.2	4 9	5 7	0.5	4.5	3 6	4 5	00	1.	.....	4 6	00	0.3	.....	00	4 8	00	0.45	.....	0.8
19	5 4	0.5	4.9	4 4	5 6	0.5	4.25	3 4	4 5	00	0.9	0 4	4 6	00	0.3	.....	0.1	4 8	00	0.45	0 11	0.9
20	5 3	0.5	4.8	4 1	5 2	0.5	4.	3 1	4 6	00	0.9	.....	4 6	00	0.3	.....	0.1	4 8	00	0.45	.....	0.9
21	5 1	0.4	4.0	3 9	5 1	0.4	3.5	2 11	4 6	00	0.8	.....	4 6	00	0.2	.....	0.1	4 8	00	0.5	.....	0.9
22	5 1	0.4	3.7	3 5	5 1	0.4	3.	2 9	4 6	00	0.7	.....	4 6	00	0.2	.....	0.1	4 8	00	0.5	0 11	0.9
23	5 1	0.3	3.6	3 1	5 1	0.3	2.5	2 6	4 6	00	0.6	0 3	4 6	00	0.2	.....	0.1	4 8	00	0.5	.....	0.9
24	5	0.3	3.4	2 10	5	0.3	2.4	2 4	4 6	00	0.5	0 2	4 6	00	0.2	.....	0.1	4 8	00	0.6	0 10	0.9
25	4 11	0.25	3.2	2 8	5 1	0.3	2.4	2 3	4 6	00	0.5	.....	4 6	00	0.2	.....	0.1	4 8	00	0.6	.....	0.9
26	4 11	0.2	2.9	2 5	5 1	0.2	2.3	2 1	4 6	00	0.5	.....	4 6	00	0.2	.....	0.2	4 8	00	0.6	.....	0.85
27	4 10	0.2	2.8	2 2	4 11	0.2	2.2	2	4 6	00	0.5	.....	4 6	00	0.1	.....	0.1	4 8	00	0 6	.....	0.9
28	4 10	0.2	2.6	2	4 10	0.2	2.	1 10	4 6	00	0.5	.....	4 6	00	0.1	.....	0.1	4 8	00	0.7	0 10	0.9
29	4 10	0.25	2.3	.....	4 9	0.2	1.9	1 10	4 6	00	0.5	.....	4 9	00	0.1	0 7	0.3	4 8	00	0.7	.....	0.9
30	4 10	0.3	2.4	1 8	4 9	0.2	1.8	1 9	4 6	00	0.5	.....	4 9	00	0.1	.....	0.3	4 8	00	0.7	.....	0.9
31	.....	.....	.....	.....	4 9	0.1	1.75	1 5	4 6	00	0.5	000	.....	.....	.....	.....	.....	4 8	00	0.8	.....	0.9

Water Gauges at LaSalle, Henry, Peoria and Copperas Creek.

Day.	November, 1873.					December, 1873.					January, 1874.					February, 1874.					March, 1874.				
	LaSalle...	Henry.		Peoria.....	Copperas Creek.	LaSalle...	Henry.		Peoria.....	Copperas Creek.	LaSalle...	Henry.		Peoria.....	Copperas Creek.	LaSalle...	Henry.		Peoria.....	Copperas Creek.	LaSalle...	Henry.		Peoria.....	Copperas Creek.
		Ab ve lock.	B'low lock.				Ab ve lock.	B'low lock.				Ab ve lock.	B'low lock.				Ab ve lock.	B'low lock.			Ab ve lock.	B'low lock.		
	Ft in	Feet.	Feet.	Ft. in	Feet.	Ft in	Feet.	Feet.	Ft in.	Feet.	Ft in	Feet.	Feet.	Ft in.	Feet.	Ft in	Feet.	Feet.	Ft in.	Feet.	Ft in	Feet.	Feet.	Ft in.	Feet.
1.....	4 8	0.3	0.8	.....	0.9	.....	0.7	1.7	1 3	1.2	.....	2.2	9.1	8.5	9.5	.....	6.7	13.25	12 3	11.3	.....	5.7	12.6	11 11	12.3
2.....	4 9	0.3	0.8	.....	0.9	.....	0.8	1.7	1 4	1.2	.....	2.1	9.	8.3	9.5	.....	6.6	13.15	12 3	11.85	.....	5.5	12.6	11 9	12.3
3.....	4 9	0.3	0.9	0 11	0.9	.....	0.8	1.75	1 5	1.5	.....	2.	9.	8.3	8.6	.....	6.4	13.5	12	12.2	.....	5.5	12.5	11 7	12.2
4.....	4 9	0.3	0.9	.....	0.9	.....	0.8	1.75	1 7	1.7	.....	2.	9.	8.2	8.6	.....	6.	12.8	11 10	12.05	.....	5.5	12.4	11 8	12.2
5.....	.....	0.3	0.9	0 10	0.9	.....	0.8	1.75	1 9	1.7	.....	2.1	9.	8.1	8.5	.....	5.5	12.5	11 7	12.	.....	5.6	12.6	11 9	12.1
6.....	.....	0.4	0.9	1 00	0.9	.....	0.9	1.8	1 9	1.7	.....	2.1	8.75	8.	8.3	.....	5.2	12.3	11 4	11.9	.....	5.8	12.8	11 11	12.1
7.....	.....	0.4	0.9	0 11	0.9	.....	0.9	1.8	2	1.8	.....	2.1	8.6	7.11	8.1	.....	4.8	11.8	11	11.8	.....	6.5	13.5	12 3	12.
8.....	.....	0.4	1.	0 8	0.9	.....	0.95	1.9	2	2.	.....	2.1	8.5	7.9	8.	.....	4.6	11.6	10 10	11.2	.....	7.	13.8	12 6	12.
9.....	.....	0.4	1.	0 5	0.9	.....	1.	2.	2 6	3.7	.....	2.05	8.4	7.8	7.9	.....	4.4	11.4	10 7	11.4	.....	7.	13.8	12 7	12.
10.....	.....	0.4	1.	0 9	0.9	.....	1.	2.2	2 9	4.	.....	2.	8.2	7.7	7.8	.....	4.2	11.2	10 5	11.25	.....	7.	14.	13 2	12.
11.....	.....	0.4	1.	1	0.9	.....	1.2	2.4	3 3	4.8	.....	1.8	8.	7.5	7.7	.....	4.	10.	10 2	11.	.....	6.9	13.8	13	12.1
12.....	.....	0.4	1.1	1 2	0.9	.....	2.	3.7	5	7.	.....	1.6	7.8	7.4	7.55	.....	3.8	9.8	10	10.7	.....	6.7	13.6	12 11	12.2
13.....	.....	0.4	1.1	1 2	0.9	.....	3.3	7.6	6 6	8.2	.....	1.5	7.5	7.	7.45	.....	3.6	9.5	10 3	10.6	.....	6.5	13.5	12 8	12.3
14.....	.....	0.4	1.1	1 1	0.9	.....	4.3	10.1	7 7	8.8	.....	1.4	7.35	6.9	7.2	.....	5.	11.6	10 5	10.6	.....	6.2	13.2	12 6	12.3
15.....	.....	0.4	1.1	1	0.9	.....	4.5	10.5	8 6	9.25	.....	1.3	7.2	.....	7.	.....	6.1	12.7	12 3	10.5	.....	6.	12.	12 2	12.3
16.....	.....	0.4	1.1	0 11	0.9	.....	4.7	11.	9 2	9.45	.....	1.2	7.	.....	6.9	.....	7.7	14.1	13 2	10.7	.....	5.6	12.6	11 11	12.3
17.....	.....	0.5	1.2	1 2	0.9	.....	4.7	11.	9 9	9.6	.....	1.1	6.8	.....	6.8	.....	8.	14.5	13 2	10.8	.....	5.4	12.4	11 8	12.25
18.....	.....	0.5	1.2	1 4	0.9	.....	4.6	11.	10	9.7	.....	1.05	6.5	5.11	6.6	.....	8.2	15.	13 8	11.	.....	5.2	12.2	11 6	12.2
19.....	.....	0.5	1.2	1 1	0.9	.....	4.5	11.	10 3	9.8	.....	1.	6.2	5.9	6.5	.....	8.	14.9	13 9	11.2	.....	5.	12.	11 5	12.1
20.....	.....	0.5	1.2	1 1	0.9	.....	4.25	11.	10 4	9.9	.....	1.	5.8	5.6	6.3	.....	7.7	14.7	13 9	11.4	.....	4.8	11.7	11 1	11.6
21.....	.....	0.6	1.3	1	0.9	.....	4.	10.85	10 2	10.6	.....	0.95	5.65	5.4	6.2	.....	7.5	14.4	13 7	11.6	.....	4.7	11.6	11	11.6
22.....	.....	0.6	1.3	1 1	0.9	.....	3.8	10.7	10	10.4	.....	2.4	7.5	6.4	6.9	.....	7.25	14.2	13 4	11.8	.....	4.4	11.4	10 10	11.6
23.....	.....	0.6	1.3	1 2	0.9	.....	3.4	10.4	9 10	10.4	.....	3.8	9.5	8.1	7.9	.....	7.	13.8	13	12.	.....	4.2	11.2	10 9	11.5
24.....	.....	0.6	1.3	1 3	1.	.....	3.3	10.3	9 8	10.15	.....	4.8	10.1	8.11	8.6	.....	6.8	13.7	12 11	12.2	.....	4.	11.	10 4	11.3
25.....	.....	0.6	1.3	1 5	1.	.....	3.2	10.15	9 6	9.9	.....	5.	11.25	9.9	9.8	.....	6.4	13.4	12 9	12.3	.....	3.9	10.8	10 2	11.2
26.....	.....	0.7	1.5	1 4	1.	.....	3.	9.85	9 5	9.7	.....	5.2	11.8	10.4	10.2	.....	6.02	13.02	12 5	12.3	.....	3.8	10.6	10 1	11.
27.....	.....	0.7	1.5	.....	1.1	.....	2.8	9.7	9 3	9.6	.....	5.3	12.1	10.7	10.3	.....	6.	13.	12 3	12.3	.....	3.7	10.4	10	10.9
28.....	.....	0.75	1.6	.....	1.1	.....	2.6	9.5	9 1	9.6	.....	5.4	12.4	11.11	10.5	.....	5.8	12.8	12	12.3	.....	3.3	10.2	9 9	10.8
29.....	.....	0.75	1.6	.....	1.2	.....	2.5	9.4	8 11	9.55	.....	6.3	13.	11.5	10.8	.....	.....	.....	.....	.....	.....	3.2	10.	9 7	10.7
30.....	.....	0.7	1.6	.....	1.2	.....	2.4	9.3	8 7	9.2	.....	6.7	13.35	11.11	10.9	.....	.....	.....	.....	.....	.....	2.9	9.8	9 4	10.5
31.....	.....	.....	.....	.....	.....	.....	2.3	9.2	8 6	9.1	.....	6.8	13.45	12.2	11.2	.....	.....	.....	.....	.....	.....	2.6	9.5	9	10.3

Water Gauges at LaSalle, Henry Peoria and Copperas Creek.

Day	April, 1874.					May, 1874.					June, 1874.					July, 1874.					August, 1874.				
	LaSalle	Henry.		Peoria.....	Copperas Creek.	LaSalle	Henry.		Peoria.....	Copperas Creek.	LaSalle	Henry.		Peoria.....	Copperas Creek.	LaSalle	Henry.		Peoria.....	Copperas Creek.	LaSalle	Henry.		Peoria.....	Copperas Creek.
		Ab'v Lock.	B'low Lock.				Ab'v Lock.	B'low Lock.				Ab'v Lock.	B'low Lock.				Ab'v Lock.	B'low Lock.				Ab'v Lock.	B'low Lock.		
	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.
1	2.4	9.2		8 9	10.2	8	2.2	7.4	6 10	7.3	5 1	0.4	3.25	3 1	3.3	4 9	00	1.48	1 6	1.45	4 6	00	00	0 2	0.3
2	2.3	9.		8 7	9.95	7 11	2.3	7.5	6 11	7.35	5	0.4	3.1	2 9	2.95	4 9	00	1.23	1 4	1.35	4 5	00	*0.07-	0 2	0.28
3	2.	8.8		8 4	9.65	7 8	2.4	7.6	6 11	7.45	5 1	0.3	2.8	2 7	2.8	4 8	00	1.	1 3	1.25	4 4	00	0.07-	0 2	0.25
4	1.8	8.6		8 3	9.6	7 7	2.5	7.7	7	7.45	4 11	0.3	2.6	2 5	2.7	4 10	00	0.9	1 1	1.2	4 4	00	0.07-	0 1	0.23
5	1.7	8.4		8 1	9.45	9	2.5	7.7	7	7.5	5 2	0.4	2.6	2 5	2.7	4 7	00	0.85	1 1	1.1	4 5	00	0.07-	00	0.25
6	1.6	8.2		7 9	9.25	8 4	2.6	8.0	7 2	7.5	5 1	0.5	2.7	2 5	2.7	4 7	00	0.83	1	1.05	4 4	00	0.07-	00	0.23
7	1.5	7.9		7 7	9.1	8 1	2.7	8.2	7 4	7.5	5 1	0.6	2.8	2 4	2.65	4 6	00	0.8	0 10	0.95	4 5	00	0.07-	00	0.22
8	1.4	7.7		7 4	9.	7 8	2.5	8.3	7 5	7.55	5	0.8	2.9	2 3	2.55	4 7	00	0.75	0 11	1.25	4 5	00	0.07-	00	0.2
9	1.3	7.3		7 2	8.5	7 3	2.3	8.2	7 3	7.55	6	1.1	3.	2 3	2.5	4 8	00	0.73	1	1.1	4 5	00	0.07-	00	0.2
10	1.3	7.2		7	8.	6 9	2.	7.8	7 2	7.5	7 4	1.5	3.8	2 9	2.6	4 7	00	0.73	0 11	1.05	4 5	00	0.05-	00	0.2
11	1.2	7.2		6 9	8.	6 7	1.6	7.6	7	7.45	7 5	1.6	4.3	3 5	3.1	4 7	00	0.53	0 10	1.	4 5	00	00	00	0.2
12	1.2	7.4		6 9	8.	6 4	1.4	7.2	6 9	7.4	7 11	1.7	5.	4	3.6	4 6	00	0.5	0 9	0.9	4 7	00	0.1	00	0.2
13	1.2	7.3		6 9	7.85	6 3	1.5	7.	6 7	7.3	6 6	1.5	4.9	4 4	3.95	4 6	00	0.5	0 8	0.8	4 6	00	0.1	0 1	0.2
14	1.4	7.3		6 9	7.7	6 3	1.4	6.8	6 4	7.1	6	1.2	4.8	4 6	4.1	4 7	00	0.5	0 7	0.7	4 6	00	0.1	0 2	0.28
15	1.4	7.2		6 10	7.6	6 1	1.3	6.6	6 1	7.	5 9	0.9	4.7	4 4	4.2	4 8	00	0.5	0 6	0.6	4 5	00	0.08	0 3	0.25
16	1.5	7.		6 8	7.4	6 2	1.2	6.3	6	6.9	5 9	0.6	4.6	4 2	4.1	4 7	00	0.45	0 6	0.55	4 5	00	0.08	0 2	0.25
17	1.5	6.8		6 6	7.4	6 3	1.2	6.2	5 10	6.8	5 7	0.6	4.3	4	4.	4 6	00	0.45	0 7	0.5	4 5	00	0.06	0 2	0.25
18	1.4	6.7		6 4	7.3	6 1	1.2	6.	5 8	6.65	5 5	0.6	4.2	3 10	3.85	4 6	00	0.4	0 6	0.5	4 5	00	0.06	0 2	0.25
19	1.3	6.6		6 2	7.2	6	1.2	6.	5 5	6.4	5 4	0.6	4.	3 8	3.7	4 7	00	0.37	0 5	0.5	4 5	00	0.04	0 2	0.23
20	1.2	6.5		6	7.1	5 11	1.2	6.	5 4	6.35	5 2	0.5	3.8	3 7	3.5	4 6	00	0.35	0 5	0.5	4 5	00	0.04	0 2	0.2
21	1.2	7.		6	7.1	5 10	1.1	5.8	5 1	6.1	5 2	0.5	3.7	3 3	3.3	4 6	00	0.35	0 5	0.6	4 5	00	0.03	0 2	0.18
22	1.3	7.		6 1	7.1	5 9	1.1	5.6	4 10	5.9	5 1	0.5	3.2	3	3.	4 6	00	0.35	0 5	0.6	4 4	00	0.03	0 2	0.18
23	1.4	7.		6 2	7.1	5 8	1.1	5.5	4 7	5.75	5	0.5	3.	2 9	2.85	4 6	00	0.33	0 5	0.55	4 4	00	0.03	0 2	0.2
24	1.6	7.		6 3	7.1	5 7	0.9	5.3	4 4	5.3	5	0.4	2.6	2 6	2.7	4 5	00	0.33	0 4	0.5	4 4	00	0.04	0 2	0.3
25	1.8	7.		6 5	7.1	5 9	0.9	5.	4 3	5.	4 11	0.3	2.38	2 4	2.5	4 6	00	0.3	0 4	0.5	4 4	00	0.04	0 2	0.3
26	1.7	7.		6 6	7.05	5 6	0.9	4.5	4 1	4.7	4 11	0.2	2.	2 1	2.3	4 6	00	0.25	0 4	0.45	4 4	00	0.05	0 2	0.3
27	1.6	6.8		6 6	7.1	5 4	0.75	4.	3 10	4.5	4 11	0.1	1.98	1 5	2.1	4 4	00	0.2	0 4	0.45	4 5	00	0.06	0 2	0.4
28	1.5	6.7		6 7	7.15	5 3	0.6	3.53	3 7	4.2	4 11	00	1.82	1 7	1.9	4 5	00	0.1	0 4	0.45	4 5	00	0.08	0 2	0.65
29	1.7	6.9		6 8	7.2	5 5	0.45	3.43	3 5	3.9	4 11	00	1.65	1 9	1.75	4 5	00	0.1	0 3	0.4	4 5	00	0.09	0 1	1.
30	2.	7.1		6 9	7.2	5 3	0.4	3.4	3 4	3.7	4 10	00	1.53	1 7	1.6	4 5	00	0.1	0 3	0.35	4 5	00	0.13	0 1	1.
31	.....	.....		.....	.....	5 3	0.4	3.35	3 3	3.5	.....	.....	.....	.....	.....	4 6	00	00	0 2	0.3	4 5	00	0.13	00	0.95

* Sign — below water of 1871.

Water Gauges at LaSalle, Henry, Peoria and Copperas Creek.

Day	September, 1874.					October, 1874.					November, 1874.					December, 1874.					January, 1875.				
	LaSalle	Henry. Ab'v. Lock.	Henry. B'low Lock.	Peoria	Copp's Cr'k	LaSalle	Henry. Ab'v. Lock.	Henry. B'low Lock.	Peoria	Copp's Cr'k	LaSalle	Henry. Ab'v. Lock.	Henry. B'low Lock.	Peoria	Copp's Cr'k	LaSalle	Henry. Ab'v. Lock.	Henry. B'low Lock.	Peoria	Copp's Cr'k	LaSalle	Henry. Ab'v. Lock.	Henry. B'low Lock.	Peoria	Copp's Cr'k
	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	F't.
1	4 5	00	0.13	0 3	0.8	4 3	00	0.25	0 4	0.65	4 7	00	0.45	0 5	0.7	4 5	00	0.55	0 6	1.	4 4	00	0.33	0 4	0.8
2	4 5	00	0.13	0 3	0.6	4 6	00	0.13	0 3	0.65	4 6	00	0.5	0 5	0.75	4 5	00	0.50	0 6	1.	4 4	00	0.30	0 4	0.75
3	4 5	00	0.03	0 2	0.6	4 6	00	0.03	0 2	0.65	4 6	00	0.55	0 5	0.75	4 5	00	0.45	0 5	1.15	4 4	00	0.28	0 4	0.8
4	4 5	00	0.08	0 2	0.6	4 5	00	0.03	0 1	0.65	4 6	00	0.65	0 5	0.8	4 5	00	0.45	0 5	1.	4 4	00	0.28	0 4	0.75
5	4 5	00	0.13	0 2	0.5	4 5	00	0.03	0 1	0.65	4 6	00	0.53	0 5	0.8	4 5	00	0.45	0 5	0.9	4 4	00	0.25	0 4	0.65
6	4 5	00	0.17	0 2	0.58	4 5	00	0.03	0 1	0.6	4 6	00	0.5	0 6	0.75	4 5	00	0.5	0 6	0.9	4 4	00	0.23	0 3	0.6
7	4 5	00	0.23	0 2	0.58	4 5	00	0.05—	0 1	0.6	4 6	00	0.5	0 6	0.7	4 5	00	0.5	0 6	0.9	4 4	00	0.2	0 3	0.65
8	4 5	00	0.33	0 3	0.58	4 5	00	0.13	0 1	0.6	4 6	00	0.6	0 6	0.8	4 5	00	0.5	0 6	0.9	4 4	00	0.2	0 3	0.6
9	4 5	00	0.33	0 3	0.57	4 5	00	0.13	0 2	0.6	4 6	00	0.63	0 5	0.7	4 4	00	0.55	0 6	0.9	4 4	0.1—	0.15	0 3	0.55
10	4 5	00	0.33	0 3	0.5	4 5	00	0.13	0 2	0.55	4 6	00	0.63	0 5	0.5	4 4	00	0.55	0 6	0.85	4 4	0.1—	0.15	0 3	0.5
11	4 5	00	0.33	0 3	0.45	4 5	00	0.13	0 2	0.55	4 6	00	0.53	0 5	0.45	4 4	00	0.5	0 6	0.85	4 4	0.2—	0.1	0 2	0.5
12	4 5	00	0.33	0 3	0.4	4 5	00	0.15	0 2	0.55	4 6	00	0.43	0 4	0.5	4 4	00	0.5	0 6	0.85	4 4	0.3—	.....	0 2	0.6
13	4 5	00	0.43	0 2	0.4	4 5	00	0.15	0 2	0.6	4 6	00	0.4	0 4	0.5	4 4	00	0.45	0 6	0.8	4 3	0.4—	0.1—	0 1	0.55
14	4 5	00	0.43	0 1	0.4	4 5	00	0.15	0 2	0.6	4 5	00	0.33	0 4	0.5	4 4	00	0.45	0 5	0.75	4 3	0.5—	0.1—	0 1	0.45
15	4 5	00	0.33	0 1	0.5	4 6	00	0.23	0 3	0.6	4 5	00	0.33	0 5	0.6	4 4	00	0.45	0 5	0.8	4 3	0.57—	0.17—	0 1	0.45
16	4 5	00	0.03	0 2	0.5	4 6	00	0.23	0 3	0.65	4 5	00	0.33	0 5	0.6	4 4	00	0.4	0 5	0.8	4 3	0.67—	0.27—	0 1	0.45
17	4 5	00	0.2	0 2	0.5	4 6	00	0.23	0 3	0.7	4 5	00	0.33	0 6	0.7	4 3	00	0.4	0 5	0.75	4 3	0.7--	0.33—	0 1	0.4
18	4 5	00	0.25	0 2	0.4	4 6	00	0.23	0 3	0.7	4 6	00	0.33	0 6	0.7	4 3	00	0.43	0 5	0.8	4 3	0.7--	0.37—	0 1	0.4
19	4 5	00	0.4	0 4	0.4	4 6	00	0.23	0 3	0.65	4 6	00	0.35	0 6	0.7	4 3	00	0.43	0 5	0.85	4 3	0.67—	0.37—	0 0	0.4
20	4 6	00	0.4	0 5	0.5	4 5	00	0.23	0 3	0.65	4 8	00	0.35	0 7	0.7	4 3	00	0.43	0 5	1.	4 3	0.62—	0.37—	0 0	0.4
21	4 6	00	0.35	0 5	1.1	4 5	00	0.13	0 3	0.65	4 8	00	0.35	0 7	0.7	4 3	00	0.4	0 5	1.05	4 3	0.57—	0.37—	0 0	0.4
22	4 7	00	0.33	0 5	1.05	4 5	00	0.13	0 2	0.65	4 9	00	0.4	0 8	0.8	4 3	00	0.4	0 5	1.	4 3	0.6—	0.4—	0 0	0.4
23	4 6	00	0.43	0 5	1.	4 5	00	0.13	0 2	0.65	4 10	00	0.4	0 8	0.85	4 3	00	0.37	0 5	1.05	4 3	0.62—	0.4--	0 0	0.4
24	4 6	00	0.43	0 6	1.	4 5	00	0.13	0 2	0.65	5 1	00	0.5	0 9	0.9	4 3	00	0.37	0 5	1.05	4 3	0.65—	0.43—	0 0	0.4
25	4 5	00	0.25	0 5	1.	4 5	00	0.13	0 2	0.65	4 9	00	0.5	0 8	0.95	4 3	00	0.35	0 5	0.95	4 3	0.67—	0.45—	0 0	0.4
26	4 5	00	0.27	0 4	0.9	4 7	00	0.2	0 1	0.65	4 7	00	0.6	0 7	0.95	4 3	00	0.35	0 4	0.95	4 3	0.62—	0.4—	0 0	0.35
27	4 8	00	0.2	0 3	0.8	4 8	00	0.25	0 2	0.65	4 5	00	0.6	0 7	0.95	4 3	00	0.33	0 4	0.9	4 3	0.57—	0.37—	0 1	0.45
28	4 6	00	0.13	0 3	0.8	4 10	00	0.3	0 3	0.65	4 6	00	0.6	0 7	0.9	4 3	00	0.33	0 4	0.75	4 3	0.60—	0.4—	0 1	0.4
29	4 7	00	0.2	0 2	0.75	4 10	00	0.35	0 4	0.65	4 5	00	0.6	0 7	0.9	4 3	00	0.33	0 4	0.8	4 3	0.62—	0.47—	0 1	0.4
30	4 7	00	0.3	0 3	0.7	4 9	00	0.4	0 5	0.65	4 5	00	0.6	0 7	0.9	4 3	00	0.3	0 4	0.7	4 3	0.67—	0.4—	0 1	0.45
31	.....	.....	.....	.....	.....	4 9	.....	0.4	0 5	0.65	.....	.....	.....	.....	.....	.....	00	0.3	0 4	0.75	4 3	0.67—	0.37—	0 1	0.30

Sign — below low water of 1871.

Water Gauges at LaSalle, Henry, Peoria and Copperas Creek.

Day.....	February, 1875.					March, 1875.					April, 1875.					May, 1875.					June, 1875.				
	LaSalle...	Henry.		Peoria.....	Copperas Creek...	LaSalle....	Henry.		Peoria.....	Copperas Creek...	LaSalle....	Henry.		Peoria.....	Copperas Creek...	LaSalle....	Henry.		Peoria.....	Copperas Creek...	LaSalle...	Henry.		Peoria.....	Copperas Creek...
		A've lock.	B'low lock.				A've lock	B'low lock.				A've lock.	B'low lock.				A've lock.	B'low lock.				A'be lock.	B'low lock.		
	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.
1	.....	0.67—	0.37—	.....	0.6	.....	1.25	4.65	.....	5.3	.....	6.9	13.5	12 8	12.1	5 7	0.53	5.3	4 11	6.5	6 1	0.75	4.	3 9	3.3
2	.....	0.67—	0.37—	.....	0.6	.....	1.4	5.2	.....	5.2	.....	6.6	13.4	12 8	12.15	5 8	0.5	5,1	4 11	6.35	5 10	0.75	4.	3 9	2.95
3	.....	0.67—	0.37—	.....	0.55	.....	1.2	5.	.....	5.35	.....	6.3	13.1	12 6	12.2	5 7	0.53	5.	4 7	6,1	5 10	0.75	4.	3 9	2.8
4	.....	0.67—	0.37—	.....	0.5	.....	1.	4.8	.....	5.35	.....	6.	12.7	12 3	12.15	5 8	0.53	4.8	4 5	5.9	5 10	0.75	3.95	3 8	2.7
5	.....	0.67—	0.35—	.....	0.5	.....	0.82	4.7	.....	5.3	.....	5.6	12.4	11 10	12.	5 8	0,63	4.6	4 4	5.55	5 9	0.7	3.9	3 7	2,7
6	.....	0.65—	0.35—	.....	0.5	.....	0.75	4.6	.....	5.35	.....	5.4	12.2	11 9	12.	5 9	0.63	4.45	4 3	5.4	5 8	0.65	3.85	3 7	2.7
7	.....	0.65—	0.37—	.....	0.55	.....	0.6	4.3	.....	5.4	.....	5.2	12.	11 7	11.8	5 8	0.63	4.45	4 2	5.3	5 8	0.6	3.7	3 5	2.65
8	.....	0.67—	0.37—	.....	0.6	.....	0.2	4.13	.....	6.4	.....	4.9	11.7	11 4	11.7	5 8	0.63	4.45	4	5,1	5 7	0.55	3.6	3 3	2.55
9	.....	0.67—	0.37—	.....	0.6	.....	0.1	4.	.....	5.4	.....	4.9	11.7	11 1	11.65	5 9	0.6	4,4	4	4.95	5 6	0.5	3.6	3	2.5
10	.....	0.67—	0.40—	.....	0.6	.....	0.1	3.85	.....	5.45	.....	4.6	11.4	10 11	11.5	5 8	0.57	4.3	4	4.8	5 6	0.5	3.55	3	2.6
11	.....	0.67—	0.40—	.....	0.6	.....	00	3.7	.....	5 45	.....	4.3	11.1	10 10	11.4	5 8	0.55	4.25	4	4.7	5 6	0.45	3.5	3	3.1
12	.....	0.7—	0.4—	.....	0.6	.....	0.15-	3.4	.....	5.5	.....	4.	11.	10 7	11.2	5 10	0.7	4.25	4	4.55	5 5	0.45	3.4	3	3.6
13	.....	0.7—	0.4—	.....	0.6	.....	0.27-	3.25	.....	5.6	.....	3.9	10.6	10 5	11.1	5 10	0.9	4.25	3 11	4.45	5 5	0.55	3.3	3	3.95
14	.....	0.67—	0.37—	.....	0.6	.....	1.1	5.75	.....	7.15	.....	3.8	10.4	10 2	11.	6	1.1	4.25	3 11	4.35	5 7	0.75	3.2	3 1	4.1
15	.....	0.67—	0.37—	.....	6.6	.....	3.2	8.53	.....	8.	6 9	3.4	10.1	9 9	10.8	6 1	1.	4.25	4	4.3	5 9	0.88	3.58	3 2	4.2
16	.....	0.67—	0.4—	.....	0.65	.....	5.03	12.08	.....	8.5	6 9	3.2	9.9	9 8	10.6	6 1	0.95	4.25	4	4.3	5 9	0.88	3.73	3 5	4.1
17	.....	0.67—	0.4—	.....	0.65	.....	6.03	12.28	.....	9.5	6 7	2.9	9.6	9 6	10.4	6	0.85	4.2	4	4.2	5 8	0.75	3.7	3 4	4.
18	.....	0.7—	0.4—	.....	0.7	.....	6.33	12.83	.....	10.2	6 4	2.7	9.4	9 2	10.2	5 11	0,8	4.15	3 11	4.15	5 6	0.7	3.6	3 3	3.85
19	.....	0.7—	0.37—	.....	0.8	.....	6.33	12.83	.....	10.3	6 5	2.4	9.2	8 10	9.9	5 11	0.75	4,1	3 10	4.1	5 4	0.6	3.5	3 3	3.7
20	.....	0.7—	0.35—	.....	0.8	.....	6.2	12.75	.....	10.6	7 1	2.05	8.8	8 6	9.75	5 10	0.7	4.05	3 10	4.	5 1	0.5	3.3	3 2	3.5
21	.....	0.7—	0.33—	.....	0.85	.....	5.8	12.55	.....	11.	7 4	1.65	8.4	8 3	9.5	5 9	0.7	4.05	3 9	4.	5 1	0.4	3.1	3 1	3.3
22	.....	0.67—	0.33—	.....	0.9	.....	5.33	12.33	12.	11.35	6 11	1.45	8.2	8 1	9.3	5 10	0.7	4,05	3 9	4.	5	0.3	2.95	3	3.
23	.....	0.28—	0.85	.....	1.1	... .	5.08	12.2	11.8	11.55	6 7	1.35	7.9	7 9	9.	5 10	0.8	4.1	3 10	4.1	5	0.2	2.9	3	2,85
24	.....	0.07—	1.28	.....	2.75	.....	4.73	11.83	11.5	11.65	6 5	1.1	7.5	7 5	8.75	5 10	0.85	4.15	3 11	4,1	5	0.1	2.85	2 9	2.7
25	.....	0.2	2.1	.....	3.2	.....	4.53	11.53	11.2	11.8	6 2	0.95	7.2	7 1	8.45	5 10	0.8	4.1	3 11	4.2	5	0.1	2.65	2 8	2.5
26	.....	0.67	3.15	.....	3.85	.....	4.43	11.43	11.	11.9	6	0.8	6.9	6 9	8.15	5 10	0.4	4.	3 10	4.15	4 11	0.1	2.45	2 7	2,3
27	.....	0.93	3.65	.....	4.5	.....	4.73	11.68	11.	11.95	5 9	0.65	6.6	6 5	7.7	5 9	0.75	3,95	3 10	4.1	4 11	0.05	2.35	2 6	2.1
28	.....	1.1	4.15	.....	5.	.....	5.1	11.8	11.1	11.9	5 8	0.6	6.2	6	7.5	5 9	0.8	4.	3 9	4	4 11	0.05	2.25	2 6	1.9
29	.....	.....	.....	.....	.....	.....	5.87	12.23	11.4	11.9	5 8	0.57	5.9	5 10	7.15	5 9	0.95	4,05	3 9	3.9	4 11	0.05	2.15	2 5	1.75
30	.....	.....	.....	.....	.....	.....	6.73	13.03	11.11	11.8	5 7	0.53	5.5	5 6	6.85	6 1	1.1	4 1	3 8	3.9	4 9	0.05	2.1	2 5	1.6
31	.....	.....	.....	.....	.....	.....	7.	13.6	12.4	11.8	.....	.....	.....	.....	.....	6 1	0,95	4.1	3 9	3.85	.....	.....	.....	.....	.....

Water Gauges at LaSalle, Henry, Peoria and Copperas Creek.

Day	July, 1875.					August, 1875.					September, 1875.					October. 1875.					November. 1875.				
	LaSalle.....	Henry.		Peoria.....	Copperas Creek.	LaSalle.....	Henry.		Peoria.....	Copperas Creek.	LaSalle.....	Henry.		Peoria.....	Copperas Creek.	LaSalle.....	Henry.		Peoria.....	Copperas Creek.	LaSalle.....	Henry.		Peoria.....	Copperas Creek.
		Ab'v lock.	B'low lock.				Ab'v lock.	B'low lock.				Ab'v lock.	B'low lock.				Ab'v lock.	B'low lock.				Ab'v lock.	B'low lock.		
	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Feet.	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.
1	4 9	0.05	1.85	.....	2..7	9 4	2..73	8..13	7 9	8..	5 7	0.8	6.95	7 1	8.16	5 4	0.4	4.	.....	4.8	7 10	1.73	5.43	4 10	4.8
2	4 10	0.05	1.75	.....	2.7	11 1	3.33	8.83	8 1	8.35	5 8	0.75	6.8	6 10	8.	5 4	0.4	4.	.....	4.6	7 7	1.73	5.88	5 3	5.
3	4 11	0.00	1.65	.....	2.8	13 1	3.93	9.53	8 7	8.65	5 6	0.67	6.4	6 4	7.66	5 4	0.4	3.75	.....	4.3	7 8	1.78	6.	5 8	5.2
4	4 10	0.0	1.6	.....	3.	14 1	4.48	10.33	9 2	9.	5 4	0.6	6	6 0	7.35	5 3	0.4	3.5	3.3	4.1	7 0	1.63	6.18	5 10	5.5
5	5 0	0.1	1.75	.....	3.9	14 3	4.93	11.	9 10	9.35	5 3	0.52	5.5	5 7	7.	5 3	0.35	3.33	3.5	4.	6 11	1.53	6.18	5 10	5.7
6	4 11	0.15	1.9	.....	4.4	14 2	5.33	11.53	10 6	9.85	5 2	0.43	5.	5 1	6.5	5 9	0.53	3.53	.....	4.2	6 7	1.48	6.13	5 10	5.75
7	4 10	0.23	2.2	.....	4.4	14	5.58	12.	11 0	10.28	5 1	0.33	4.83	4 10	6.27	6 10	0.63	3.83	.....	4.3	6 6	1.28	6.93	5 9	5.75
8	4 10	0.2	2.2	2 2	4.4	13 7	5.73	12.28	11 2	10.49	5 6	0.43	4.65	4 7	5.87	8 2	1.43	4.33	.....	4.7	6 5	1.13	5.93	5 6	5.75
9	4 11	0.2	2.18	.....	4.3	12 11	5.73	12.45	11 8	10.68	5 8	0.68	4.55	4 5	5.81	8 6	1.88	5.75	4.5	5.	6 3	0.93	5.63	5 4	5.75
10	4 10	0.18	2.18	.....	4.3	12 3	5.53	12.33	11 8	10.94	6 7	0.9	4.8	5 1	6.8	8 0	2.1	5.88	5.3	5.25	6 0	1.03	5.53	5 2	5.7
11	4 9	0.18	2.15	.....	4.2	12	5.53	12.33	11 8	11.16	8 4	1.	5.13	5 0	7.	7 9	2.	6.33	5.6	5.5	5 11	0.93	5.53	5 0	5.6
12	4 9	0.15	2.15	1 11	3.9	13 6	5.63	12.38	11 8	11.18	8 1	1;93	5.93	6 0	7.2	7 2	1.88	6.53	.....	5.7	5 11	0.93	5.1	4 11	5.5
13	4 9	0.15	2.13	.....	3.85	14 1	5.83	12.48	11 9	11.27	8 5	2.33	6.63	6 3	7.3	6 11	1.8	6.73	.....	5.8	5 8	0.83	4.87	4 9	5.4
14	4 9	0.13	2.1	.....	3.8	12 8	5.8	12.58	11 10	11.54	8 2	2.33	7.33	6 6	7.3	6 11	1.53	6.83	.....	5.9	5 9	0.83	4.63	4 6	5.2
15	4 9	0.1	2.	.....	3.85	11 4	5.75	12.55	11 11	11.66	8 0	2.13	7.33	6 9	7.4	6 5	1.43	6.43	6.2	6.	5 10	0.7	4.53	4 4	5.
16	4 9	0.0	2.95	.....	3.7	11 2	5.55	12.33	11 9	11.6	7 6	2.13	7.63	7 2	7.6	6 4	1.23	6.	6.	6.	5 11	0.63	4.43	4 2	4.75
17	4 10	0.25	2.25	.....	3.5	10 9	5.10	12.	11 8	11.48	7 3	2.03	7.63	7 5	7.8	6 2	1.1	5.85	5.9	5.9	6 0	0.63	4.43	4 0	4.5
18	6 5	1.23	3.53	.....	3.5	10 2	4.75	11.73	11 7	11.35	7 2	1.73	7.53	7 3	7.8	6 0	1.	5.73	5.8	5.8	5 11	0.73	4.5	3 10	4.3
19	7 5	1.73	4.63	3 10	4.	9 9	4.33	11.33	.....	11.25	7 1	1.63	7.43	7 2	7.75	6 0	0.93	5.63	5.4	5.6	5 10	0.73	4.25	3 10	4.15
20	7 11	1.83	5.13	.....	4.9	8 10	4.	11.	.....	11.11	6 11	1.53	7.33	7 0	7.6	5 11	0.83	5.53	5.0	5.55	5 8	0.73	4.	3 10	4.
21	7 9	1.83	5.63	.....	5.3	8 4	3.5	10.5	.....	10.8	6 8	1.43	7.13	6 10	7.5	5 10	0.83	5.33	4.10	5.4	5 7	0.73	3.93	3 10	3.9
22	7 6	1.73	5.93	.....	5.5	8 1	3.2	10.2	.....	10.5	6 6	1.23	7.	6 7	7.3	5 9	0.78	5.05	4.8	5.2	5 7	0.73	3.83	3 10	3.85
23	7 4	1.53	6.	5 7	5.6	7 11	2.88	9.83	9 9	10.3	6 5	1.13	6.73	6 3	7.1	5 8	0.68	4.83	4.6	5.	5 6	0.63	3.73	3 7	3.8
24	6 9	1.53	5.93	.....	5.65	7 7	2.83	9.93	.....	10.2	5 11	1.08	6.36	5 11	6.8	5 5	0.65	4.58	4.4	4 8	5 5	0.53	3.53	3 5	3.7
25	6 9	1.33	5.9	.....	5.6	7 5	2.25	9.23	.....	10.	5 9	1.09	6.	5 9	6.6	5 4	0.63	4.33	4.2	4.5	5 4	0.68	3.53	3 3	3.5
26	6 8	1.33	5.83	.....	5.5	7 1	2.13	9.	8 9	9.7	5 6	0.73	5.78	5 6	6.3	5 5	0.58	4.13	4.	4.4	5 8	0.68	3.53	3 4	3.45
27	6 5	1.3	5 80	6 1	5.5	6 9	1.9	8.73	8 6	9.45	5 5	0.73	5.78	5 4	6.	5 4	0.53	3.93	3.10	4.2	5 8	0.68	3.53	.....	3.4
28	7 9	1.93	6.48	.....	5.5	6 4	1.65	8.37	8 2	9.35	5 4	0.63	5.	5 2	5.8	5 4	0.53	3.93	3.7	4.	5 7	0.58	3.43	.....	3.4
29	8 5	2.13	7.	6 5	6.3	6 2	1.33	8.	7 10	9.	5 5	0.53	4.7	5 0	5.	7 0	0.6	4.	3.5	4.	5 7	0.58	3.43	.....	3.4
30	9 0	2.48	7.33	.....	6.6	5 9	1.15	7.65	7 7	8.66	5 4	0.43	4.48	.....	5.2	7 8	0.83	4.5	4.4	4.	5 5	0.48	3.83	.....	3.4
31	9 2	2.53	7.73	.....	7.	5 9	0.92	7.3	7 4	8.33	.....	.....	.....	.....	.....	7 9	1.05	5.	4.6	4.5	.....	.....	.....	.....	.....

Water Gauges at LaSalle, Henry, Peoria and Copperas Creek.

Day	December, 1875.					January, 1876.					February, 1876.					March, 1876.					April, 1876.				
	LaSalle.....	Henry.		Peoria.....	Copperas Creek.	LaSalle.....	Henry.		Peoria.....	Copperas Creek.	LaSalle.....	Henry.		Peoria.....	Copperas Creek.	LaSalle.....	Henry.		Peoria.....	Copperas Creek.	LaSalle.....	Henry.		Peoria.....	Copperas Creek.
		Ab'v Lock.	B'low Lock.				Ab'v Lock.	B'low Lock.				Ab'v Lock.	B'low Lock.				Ab'v Lock.	B'low Lock.				Ab'v Lock.	B'low Lock.		
	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Ft.
1	.....	0.48	3.33	4 10	.....	.....	1.93	6.63	5 7	5.5	.....	2.48	9.13	8 8	9.2	.....	6.	12.65	11 10	11.7	15 11	8.4	15.15	14.7	14.5
2	.....	0.48	3.33	5 3	.....	.....	2.23	7.13	6 3	5.9	.....	2.33	8.93	8 7	9.5	.....	6.25	13.	12	11.75	16 11	8.8	15.4	14.7	14.5
3	.....	0.43	3.3	5 10	.....	.....	2.73	7.83	6 10	6.6	.....	2.13	8.78	8 5	9.4	.....	6.2	12.65	12 3	11.85	16 11	9.4	15.93	14.10	14.85
4	.....	0.43	3.3	.....	.....	.....	2.93	8.23	7 3	7.18	.....	1.93	8.63	8 3	9.3	.....	6.13	12.5	12 1	11.85		10.3	16.73	15.4	15.
5	.....	0.48	3.35	.....	.....	.....	2.78	8.53	7 8	7.6	.....	1.78	8.48	8 1	8.7	.....	6.15	12.5	12	11.85		11.	17.33	15.10	15.3
6	.....	0.53	3.45	.....	.....	.....	2.63	8.53	7 11	7.78	.....	1.63	8.33	8	8.6	.....	6.3	12.9	11 10	11.8		11.2	17.83	16.4	15.6
7	.....	0.93	3.53	.....	.....	.....	2.43	8.48	7 11	7.85	.....	1.53	8.23	7 10	8.7	.....	6.9	13.45	12 4	11.9		11.2	17.93	16.7	16.
8	.....	0.88	3.73	.....	.....	.....	2.33	8.33	7 10	7.85	.....	1.48	8.03	7 9	8.6	.....	7.3	13.83	12 10	12.1		11.15	17.78	16.7	16.1
9	.....	1.13	3.03	.....	.....	.....	2.38	8.33	7 10	7.9	.....	1.63	8.13	7 8	8.45	.....	7.7	14.33	13 3	12.25		10.85	17.48	16.5	16.05
10	.....	1.28	4.33	.....	.....	.....	2.53	8.68	8 2	8.	.....	3.28	8.83	8 2	8.45	.....	7.8	14.43	13 7	12.4		10.4	17.	16.	16.
11	.....	1.43	4.83	.....	.....	.....	2.43	8.68	8 1	8.2	.....	5.93	10.93	9 2	8.85	.....	7.65	14.33	13 7	12.7	16 1	9.8	16.48	15.9	15.8
12	.....	1.43	5.	.....	.....	.....	2.03	8.43	8	8.25	.....	7.38	13.13	10 9	9.5	.....	7.65	14.33	13 7	12.85	15 3	9.5	16.23	15.7	15.5
13	.....	1.33	5.23	.....	.....	.....	1.83	8.23	7 10	8.4	.....	8.18	14.93	12 6	10.35	.....	7.55	14.23	13 6	13.	15 10	9.4	16.13	15.3	15.5
14	.....	1.	5.08	.....	.....	.....	1.73	8.03	7 6	8.3	.....	8.53	15.13	13 7	10.9	.....	7.55	14.33	13 6	13.65	Over	10.	16.63	15.6	15.7
15	.....	1.	5.08	.....	.....	.....	1.53	7.83	7 4	8.3	.....	8.73	15.38	14 2	11.5	.....	7.45	14.23	12 7	13.1	Over Lock.	10.4	17.03	15.9	15.9
16	.....	1.	4.93	.....	.....	.....	1.53	7.68	7 2	7.75	.....	8.68	15.48	14 4	12.	.....	7.7	14.43	12 8	13.25		10.1	16.73	15.11	16.
17	.....	0.9	4.8	.....	.....	.....	1.53	7.53	6 11	7.75	.....	8.43	15.23	14 4	12.3	.....	8.6	15.13	13 8	13.35	16 1	9.7	16.33	15.8	16.15
18	.....	0.8	4.65	.....	.....	.....	1.73	7.48	7 1	7.6	.....	7.98	14.88	14 3	12.6	.....	9.1	15.5	13 10	13.6	14 11	9.2	15.93	15.5	15.75
19	.....	0.75	4.43	.....	.....	.....	2.48	7.98	7 6	7.85	.....	7.58	14.48	13 7	12.7	.....	9.8	16.33	14 8	14.	14 3	8.6	15.43	14 9	15.45
20	.....	0.68	4.23	4 2	.....	.....	3.43	8.73	7 9	8.	.....	7.23	14.13	13 5	12.8	.....	9.5	16.32	15 2	14.45	13 7	8.2	15.03	14.3	15.
21	.....	0.58	4.13	4	.....	.....	3.73	9.33	8 4	8.25	.....	7.	13.9	13 2	12.75	.....	9.2	15.93	15 3	14.55	13 4	7.7	14.53	13.11	14.5
22	.....	0.58	4.13	.....	.....	.....	3.63	9.68	8 10	8.4	.....	6.6	13.5	12 10	12.7	.....	8.8	15.63	15	14.5	12 9	7.4	14.08	13.8	14.2
23	.....	0.68	4.03	.....	.....	.....	3.58	9.80	9 2	8.6	.....	6.2	13.	12 8	12.7	.....	8.4	15.13	14 9	14.35	12 2	7.	13.66	13.3	13.7
24	.....	0.73	4.33	.....	.....	.....	3.58	9.93	9 3	8.8	.....	5.8	12.5	12 3	12.45	.....	7.9	14.73	14 6	14.35	11 11	6.6	13.23	12.11	13.55
25	.....	0.9	4.43	.....	.....	.....	3.43	9.93	9 4	8.9	.....	5.6	12.4	12	12.25	.....	7.8	14.63	14 3	14.4	11 7	6.1	12.83	12.6	13.3
26	.....	1.1	4.53	.....	.....	.....	3.33	9.93	9 4	8.9	.....	5.4	12.2	11 9	12.1	.....	7.8	14.53	14 1	14.5	10 11	5.7	12.53	12.1	13.
27	.....	1.23	4.53	.....	.....	.....	3.23	9.83	9 3	9.	.....	5.2	12.1	11 7	11.9	.....	8.1	14.73	13 11	14.5	10 7	5.4	12.23	11.9	12.7
28	.....	1.38	4.93	4 5	.....	.....	3.13	9.73	9 2	9.1	.....	5.5	12.	11 5	11.85	.....	8.38	15.	14 2	14.5	10 6	5.2	11.93	11.8	12.5
29	.....	1.63	5.38	4 8	.....	.....	2.93	9.63	9 1	9.1	.....	5.75	12.25	11 8	11.65	.....	8.9	15.68	14 4	14.6	10	4.8	11.63	11.4	12.1
30	.....	1.83	5.83	4 11	.....	.....	2.78	9.48	9	9.15	.....	.....	.....	.....	.....	.....	8.8	15.63	14 7	14.6	9 7	4.35	11.23	11.	11.9
31	.....	1.83	6.33	5 2	.....	.....	2.63	9.33	8 10	9.15	.....	.....	.....	.....	.....	.....	8.6	15.33	14 8	14.5	.....	.....	.....	.....	.....

Water Gauges at LaSalle, Henry, Peoria and Copperas Creek.

Day	May, 1876.					June, 1876.					July, 1876.					August, 1876.					September, 1876.				
	LaSalle.....	Henry.		Peoria.....	Copperas Creek.	LaSalle.....	Henry.		Peoria.....	Copperas Creek.	LaSalle.....	Henry.		Peoria.....	Copperas Creek.	LaSalle	Henry.		Peoria.....	Copperas Creek.	LaSalle.....	Henry.		Peoria.....	Copperas Creek.
		Ab'v lock.	B'low lock.				Ab'v lock.	B'low lock.				Ab'v lock.	B'low lock.				Ab'v lock.	B'low lock.				Ab'v lock.	B'low lock.		
	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Fect.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.
1	9 2	3.95	10.95	10 8	11.7	6 11	2.5	9.4	8 10	9.85	13 2	6.9	13.8	13 2	12.4	6 3	1.4	8.05	7 10	9.5	5 .	0.33	2.45	2 4	2.7
2	8 11	3.65	10.63	10 6	11.5	7 7	2.4	9.2	8 11	9.7	12 7	6.7	13.6	13 2	12.5	6 1	1.2	7.7	7 5	9.25	4 11	0.33	2.33	2 3	2.7
3	8 11	3.5	10.5	10 8	11.3	7 3	2.2	9.	8 9	9.6	12 1	6.5	13.45	13	12.7	5 10	1.0	7.43	7.	9.	4 10	0.33	2.23	2 2	2.6
4	8 4	3.2	10.2	10 3	11.	7 0	2.2	8.8	8 6	9.3	12 7	6.7	13.6	12 10	12.7	5 11	0.88	7.13	6 6	8.75	4 10	0.3	2.13	2 1	2.45
5	8 7	3.	10.	9 9	10,75	6 9	2.0	8.6	8 3	9.15	13 1	6.9	13.8	13 2	15.1	6	0.73	6.93	6 2	8.5	4 10	0.33	2.23	2 2	2.35
6	8 1	2.7	9.7	9 9	10.7	6 10	1.8	8.5	8 1	9.05	13 6	7.05	14.	13 4	13.4	5 10	0.73	6.63	6 1	8.2	4 11	0.43	2.38	2 4	3.
7	9 6	3.2	10.	9 9	11.1	6 9	1.5	8.2	7 11	8.8	13 1	7.1	14.	13 4	13.7	5 9	0.73	6.33	6.	7.8	5.	0.5	2.5	2 5	3.8
8	11 5	4.	10.5	10 2	11.4	6 5	1.4	7.9	7 7	8.55	13 1	7.05	13.95	13 3	13.9	5 8	0.73	6.	5 11	7.5	5 2	0.63	2.63	2 6	5.
9	11 11	4.45	11.	10 5	11.5	6 5	1.2	7.7	7 4	8.5	12 1	6.85	13.85	13 2	13.9	5 7	0.68	5.73	5 8	7.2	5 5	0.68	2.83	2 10	5.9
10	11 9	4.7	11.3	10 11	11.7	6 5	1.2	7.5	7 2	8.25	12 2	6.65	13.6	13 1	13.7	5 7	0.63	5.53	5 8	6.8	5 7	0.88	3.53	3 3	6.45
11	11 6	4.7	11.3	10 11	11.7	7 1	1.4	7.3	6 11	8.	11 11	6.4	13.4	12 11	13.6	5 7	0.63	5.33	5 6	6.6	6 1	1.	3.73	3 7	6.7
12	11 1	4.8	11.5	11	11.65	7 6	1.6	7.4	6 11	7.85	11 7	6.2	13.2	12 9	13.5	5 8	0 63	5.13	5 3	6 4	6 5	1.	4.18	3 11	6.7
13	10 11	4.6	11.45	10 11	11.6	7 11	1.5	7.2	6 11	7.7	11 5	5.95	12.9	12 8	13.45	5 9	0.68	4.95	5 1	6.	6 8	1.	4.53	4 3	6.7
14	10 7	4.4	11.25	10 10	11.65	13 2	1.6	7.4	6 11	7.7	11 5	5.9	12.85	12 6	13.3	5 10	0.73	4.85	5.	5.6	6 9	1.18	4.93	4 6	6.8
15	9 11	4.1	11.	10 7	11.6	16 9	2.6	7.6	7 4	7.5	11 6	5.75	12.7	12 3	13.25	5 11	0.78	4.8	4 8	5.4	6 9	1.33	5.	4 9	6.8
16	9 5	3.85	10.8	10 5	11.5	16 5	4.2	9.4	8	7.75	11 1	5.6	12.5	12 1	13.2	6 1	0.83	4.73	4 6	5.2	6 9	1.23	5.43	5 2	6.65
17	8 11	3.6	10.5	10 3	11.35	17 6	5.3	10.5	9 2	8.25	10 10	5.4	12.4	11 11	13.	6	0.83	4.68	4 5	5.3	6 9	1.23	5.38	5 4	6.55
18	8 10	3.4	10.4	10 2	11.1	18 6	6.8	12.6	10 6	8.8	10 7	5.2	12.1	11 9	12.9	5 10	0 83	4.58	4 4	5.2	6 8	1.33	5.53	5 5	6.4
19	9 10	3.5	10.4	10	11.	17 4	7.45	13.7	11 10	9.4	10 4	4.9	11.9	11 6	12.75	5 9	0.78	4.43	4 2	5.1	6 6	1.33	5.43	5 6	6.25
20	10 7	3.9	10.5	9 10	10.9	15 7	7.65	14.25	12 10	10.	9 11	4.7	11.6	11 3	12.5	5 9	0.78	4.23	4.	5.	6 6	1.18	5.43	5 4	6.1
21	11 7	4.2	10.75	10 1	10.8	14 7	7.6	14.4	13 4	10.4	9 8	4.5	11.4	11 0	12.35	6 1	0.73	4.	3 9	4.6	6 6	1.23	5.43	5 2	5.9
22	11 6	4.5	11.	10 6	10.8	13 10	7.3	14.2	13 4	10.9	9 4	4.1	11.1	10 9	12.	5 10	0.58	3.9	3 8	4.4	6 5	1.1	5.33	5.	5.85
23	10 11	4.5	11.1	10 7	10.85	12 6	7.	13.9	13 5	11.2	9.	3.7	10.7	10 6	11.75	5 7	0.43	3.8	3 7	4.2	6 5	1.	5.23	4 10	5.75
24	10 5	4.4	11.1	10 7	10.75	12 4	6.7	13.5	13	11.4	8 7	3.5	10.5	10 3	11.5	5 5	0.43	3.55	3 6	4.	6 1	1.	5.23	4 8	5.63
25	10.	4.2	10.9	10 7	10.7	11 9	6.3	13.3	12 8	11.5	8 4	3.2	10.1	9 11	11.3	5 4	0.4	3.25	3 4	3.7	6 1	0.95	5.13	4 7	5.5
26	9 7	3.9	10.8	10 4	10.6	11 3	5.9	12.9	12 5	11.6	7 11	2.9	9.85	9 8	11.	5 3	0.38	3.	3 2	3.5	6 1	0.95	4.88	4 6	5.4
27	9 5	3.7	10.6	10 2	10.5	12 1	5.9	12.9	12 6	11.7	7 8	2.6	9.6	9 5	10.8	5 1	0.33	2.88	3.	3.3	6 1	0.88	4.73	4 5	5.4
28	9.	3.5	10.4	10	10.5	13 7	6.6	13.4	12 7	11.8	7 3	2.4	9.3	9 2	10.5	5 1	0.33	2.78	2 9	3.1	6 1	0.88	4.63	4 4	5.25
29	8 7	3.2	10.1	9 8	10.35	14 1	7.	13.8	12 11	11.9	6 8	2.	8.9	8 11	10.25	5 1	0.30	2.68	2 8	2.9	6 1	0.78	4.53	4 3	5.1
30	8 3	3.	9.8	9 6	10.2	13 10	7.1	13.9	13 2	12.1	6 8	1.8	8.7	8 7	10.	5 1	0 3	2.58	2 7	2.8	5 10	0.78	4.43	4 2	5.
31	8.	2.7	9.6	9	10.	.....	.....	.....	.....	.....	6 5	1.6	8.4	8 2	9.75	5 1	0.33	2.53	2 6	2.7	.....	.....	.....	.....	.....

Water Gauges at LaSalle, Henry, Peoria and Copperas Creek.

Day.....	October. 1876.						November, 1876.						December, 1876.						January, 1877.						February. 1877.					
	LaSalle.....		Henry.		Peoria.....		Copperas Creek.	LaSalle.....	Henry.		Peoria.....		Copperas Creek.	LaSalle.....	Henry.		Peoria.....		Copperas Creek.	LaSalle.....	Henry.		Peoria.....		Copperas Creek.	LaSalle.....	Henry.		Peoria.....		Copperas Creek.
			Ab'v Lock.	B'low Loek.					Ab'v Lock.	B'low Loek.					Ab'v Loek.	B'low Loek.					Ab'v Loek.	B'low Lock.					Ab'v Lock.	B'low Lock.		
	Ft.	In.	Feet.	Feet.	Ft.	In	Feet.	Ft	In.	Feet.	Feet.	Ft	In.	Feet.	Ft	In.	Feet.	Feet.	Ft	In.	Feet.	Ft	In.	Feet.	Ft	In.	Feet.	Feet.	Ft	In.	Ft.
1	5	8	0.73	4.33	4		4.8	5	1	0.43	3.	2	10	3.7	.....		0.63	4.5	4	4	5.33	.....		0.1	2.48	.....		2.6	.....		0.73	4.73	4	2	4.4
2	5	8	0.73	4.23	3	9	4.7	5	5	0.63	3.63	3	3	4.3	.....		0.58	4.45	4	2	5.2	.....		0.1	2.48	.....		2.58	.....		1.23	5.53	4	10	5.25
3	5	8	0.68	4.	3	8	4.5	5	9	0.63	3.93	3	9	5.	.....		0.58	4.4	4		5.	.....		0.1	2.48	.....		2.58	.....		1.63	6.18	5	5	4.15
4	5	8	0.68	3.83	3	6	4.35	5	11	0.83	4.33	4		5.47	.....		0.53	4.3	3	10	4.9	.....		0.05	2.43	.....		2.5	.....		1.98	6.83	6		6.65
5	5	7	0.53	3.73	3	4	4.2	6	2	0,83	4.53	4	2	5.58	.....		0.53	4.2	.....		4.85	.....		0.05	2.43	.....		2.5	.....		1.98	7.23	6	5	7.50
6	5	4	0.53	3.63	8	4	4.	6	2	0.83	4.83	4	4	5.65	.....		0.5	4.05	.....		4.8	.....		0.05	2.43	.....		2.5	.....		1.98	7.53	6	8	7.8
7	5	2	0.5	3.63	3	3	3.85	6	2	0.93	4.93	4	5	5.72	.....		0.48	3.9	.....		4.7	.....		0.05	2.43	.....		2.5	.....		1.88	7.53	6	9	8.
8	5	1	0.5	3.53	3	2	3.7	6	2	0.93	4.98	4	5	5.73	.....		0.43	3.78	.....		4.55	.....		0.05	2.43	.....		2.5	.....		1.93	7.53	6	10	7.8
9	5	1	0.5	3.23	3		3.85	6	4	0.95	4.95	4	5	5.75	.....		0.38	3.68	.....		4.4	.....		0.0	2.43	.....		2.5	.....		1.88	7.53	6	10	7.6
10	5	1	0.5	3.	2	10	3.4	6	4	0.98	4.93	4	5	5.75	.....		0.33	3.63	.....		4.3	.....		0.0	2.38	.....		2.5	.....		1.88	7.53	6	10	7.6
11	5	1	0.45	2.9	2	9	3.2	6	3	0.98	4.93	4	5	5.75	.....		0.33	3.53	.....		4.2	.....		0.0	2.28	.....		2.5	.....		1.93	7.53	6	10	7.5
12	5		0.4	2.8	2	8	3.1	6	1	0.93	4.88	4	5	5.78	.....		0.33	3.53	.....		4.2	.....		0.0	2.18	.....		2.5	.....		1,98	7.43	6	11	7.55
13	5		0.35	2.78	2	6	3.	6	1	0.93	4.83	4	5	5.78	.....		0.3	3.43	.....		4.1	.....		0.0	2.08	.....		2.5	.....		1.93	7.43	6	11	7.4
14	5	1	0.3	2.68	2	4	2.9	6	1	0.93	4.83	4	4	5.8	.....		0.3	3.43	.....		4.	.....		0.0	1.93	.....		2.5	.....		1.83	7.43	6	10	7.3
15	5	1	0.25	2.58	2	3	2.8	6	2	0.95	4.83	4	2	5.8	.....		0.3	3.33	.....		3.9	.....		0.0	1.83	.....		2.5	.....		1.73	7.33	6	10	7.2
16	5	1	0,25	2.53	2	2	2.7	6	3	0.95	4.93	4	5	5.8	.....		0.28	3.33	.....		3.8	.....		0.0	1.73	.....		2.5	.....		1.83	7.28	6	9	7.15
17	5	1	0.3	2.48	2	2	2.5	6	3	0.98	4.93	4	7	5.76	.....		0.28	3.23	.....		3.7	.....		0.0	1.63	.....		2.5	.....		1.78	7.23	6	8	7.1
18	5	1	0.35	2.43	2	2	2.5	6	3	0.08	4.95	4	8	5.78	.....		0.28	3.23	.....		3.6	.....		0.0	1.53	.....		2.5	.....		1 78	7.05	6	7	7.05
19	5	1	0.35	2.43	2	2	2.5	6	3	0.98	4.98	4	9	5.8	.....		0.28	3.13	.....		3.5	.....		0.0	1.53	.....		2.5	.....		1.78	6.88	0	6	7.
20	5	1	0.35	2.45	2	2	2.55	6	3	0.98	5.03	4	9	5.82	.....		0.23	3.13	.....		3.4	.....		0.0	1.48	.....		2.5	.....		1.63	7.13	6	7	6.9
21	5	1	0.33	2.45	2	2	2.55	.....		1.03	5.13	5		5.85	.....		0.23	2.98	.....		3.3	.....		0.0	1.48	.....		2.5	.....		1.63	7.13	6	7	6.8
22	5	1	0.33	2.48	2	3	2.58	.....		1.08	5.23	5	1	5.85	.....		0.18	2.9	.....		3.2	.....		0.0	1.43	.....		2.5	.....		1.53	6.83	6	5	6.7
23	5	1	0.33	2.48	2	3	2.6	.....		1.13	5,33	5	2	5.89	.....		0.18	2.85	.....		3.1	.....		0.0	1.43	.....		2.5	.....		1.58	6.73	6	4	6.65
24	5	1	0.33	2.53	2	3	2.6	.....		1.23	5.43	5	3	5.9	.....		0.18	2.8	.....		3.	.....		0.0	1.43	.....		2.5	.....		1.58	6.53	6	3	6.6
25	5	1	0.3	2.53	2	2	2.6	.....		1.28	5.53	5	2	5.93	.....		0.13	2.75	.....		3.	.....		0.0	1.48	.....		2.5	.....		1.53	6.48	6	2	6.55
26	5	1	0.3	2.53	2	1	2.55	.....		1.28	5.48	5	2	5.9	.....		0.13	2.65	.....		2.95	.....		0.0	1.48	.....		2.5	.....		1.43	6.48	6	2	6.5
27	5	1	0,3	2.48	2	1	2.5	.....		1.23	5.33	5		5.85	.....		0.13	2.6	.....		2.85	.....		0.0	1.53	.....		2.55	.....		1.43	6.33	6	1	6.5
28	5	1	0.3	2.48	2	1	2.5	.....		1.	5.18	4	8	5.8	.....		0.1	2.55	.....		2.75	.....		0.0	1.63	.....		2.55	.....		1.43	6.33	6		6.45
29	5	1	0.33	2.45	2	2	2.6	.....		0.83	4.88	4	6	5.65	.....		0.1	2.5	.....		2.65	.....		0.0	1.73	.....		2.55	.....		.....	.....	.....		.....
30	5	1	0.33	2.45	2	2	2.85	.....		0.63	4.53	4	4	5.55	.....		0.1	2.5	.....		2.65	.....		0.37—	2.08	2	2	2.55	.....		.....	.....	.....		.....
31	5	1	0.38	2.53	2	5	2.95	.....		.....	.....	.....		.....	.....		0.1	2.48	.....		2.65	.....		0.08—	3.13	2	10	3.8	.....		.....	.....	.....		.....

Water Gauges at LaSalle, Henry, Peoria and Copperas Creek.

	March, 1877.					April, 1877.					May, 1877.					June, 1877.					July, 1877.				
	LaSalle...	Henry.		Peoria....	Copperas Creek...	LaSalle...	Henry.		Peoria....	Copperas Creek...	LaSalle...	Henry.		Peoria....	Copperas Creek...	LaSalle..	Henry.		Peoria....	Copperas Creek...	LaSalle...	Henry.		Peoria....	Copperas Creek...
		Ab'v lock.	B'low lock.				Ab'v lock.	B'low lock.				Ab'v lock.	B'low lock.				Ab'v lock.	B'low lock,			Ab'v lock.	B'low lock.		
	Ft In	Feet.	Feet.	Et In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.
1		1.43	6.23		6.3		6.53	12.93	11 10	10.6	10 4	4.13	10.88	10 6	11.3	6	0.78	6.58	6 1	7.8	7 3	1.73	8.13	7 7	8.8
2		1.43	6.23		6.25		8.9	15.2	12 10	11.1	10	4.	10.83	10 5	11.2	5 10	0.73	6.23	6	7.5	6 11	1.63	8.03	7 7	9.
3		1.43	6.23		6.25		9.9	16.43	14 6	11.9	9 10	3.93	10.75	10 5	11.1	5 8	0.68	5.88	5 9	7.2	8	2.23	8.83	7 11	9.2
4		1.38	6 23		6.25		10.2	16.83	15 3	12.7	9 9	3·83	10.63	10 3	11.	5 7	0.63	5.53	5 5	7.2	8	2.43	8.93	8 3	9.3
5		1.38	6.23		6,25		10.	16.93	15 6	13.4	9 6	3.63	10.43	10 3	10.9	5 7	0.68	5.43	5 6	7.1	8 1	2.48	8.98	8 7	9.5
6		1.33	6.1		6.2		9.75	16.58	15 6	13.9	9 3	3.4	10.28	10	10.8	5 6	0.63	5.43	5 4	7.1	8 5	2.58	9·05	8 10	9.8
7		1.33	5.93		6.1		9.35	16.23	15 3	14.2	9 1	3.33	10.13	10	10.8	5 7	0.63	5.43	5 2	7.	8 6	2.68	9.18	8 9	9.9
8		1.23	5.88		9.		8.9	15.63	15 2	14,4	8 11	3.23	10.	9 11	10.8	5 8	0.63	5.23	5 2	7.	8 5	2.73	9.18	8 10	9.9
9		1.13	5.78		5.9		8.5	15.5	15	14.5	11 2	3.58	10.18	9 10	10.9	5 11	0.63	5.23	5	7.	8 3	2.58	9.23	8 11	9.85
10		0.98	5.73		5.9		8.2	15.2	14 6	14.5	11 9	4.	10.5	9 11	10.95	5 11	0.63	5.13	4 11	6.9	7 8	2.33	9.08	8 10	9.9
11		0.98	5.58		5.9	15 7	8.	15.	14 2	14.4	11 8	4.33	10.78	10 2	11.	5 7	0.63	5.13	4 10	6.7	7 5	2.13	8.83	8 8	9.8
12		0.98	5.43		5.95	15 4	7.8	14.8	13 10	14.3	10 10	4.33	10.63	10 2	11.	5 7	0.58	5,23	4 9	6.6	7 1	1.93	8.63	8 4	9.7
13		0.98	5.43		5.95	14 1	7.6	14.55	13 9	14.2	10 6	4.23	10.93	10 6	10.9	5 7	0.58	4.88	4 6	6.5	6 10	1.63	8.33	8	9.5
14		1.03	5.43		5.95	13 7	7.4	16.35	13 8	14.1	10	3.93	10.83	10 6	10.9	5 7	0.53	4.58	4 6	6.1	6 7	1.38	8.14	7 8	9.3
15		1.13	5.48		6.	13 1	7.2	14.1	13 5	13.9	9 8	3.63	10.63	10 2	10.85	5 5	0.53	4.38	4 3	5.8	6 1	1.18	7.73	7 5	9.1
16		1.18	5.48		6.	12 10	6.9	13.85	13 2	13.6	8 11	3.43	10.33	10	10.8	5 3	0.53	4.33	4 2	5.5	5 8	0.93	7.23	7 1	8 8
17		1.28	5.58		6.1	12 6	6.5	13.5	12 11	13.45	8 7	3.18	10.13	9 9	10.7	5 1	0.48	4.18	4	5.3	5 7	0.73	7.03	6 9	8.6
18		1.4	5.63		6.2	12 2	6.3	13.25	12 7	13.2	8 4	3.13	10.	9 7	10.6	5 1	0.48	4.	3 10	5.1	5 3	0.63	6.55	6 4	8.3
19		1.53	5.73		6.3	12	6.1	13.	12 6	13.1	8 2	2.73	9.63	9 5	10.4	5 7	0.73	4.43	4 1	5.6	5 3	0.53	5.93	6	7.9
20		1.35	5.83	5 6	6.4	12 2	5.9	12.8	12 4	13.	8 1	2.58	9.48	9 2	10.4	6 7	1.08	4.83	4 5	5.9	5 3	0.43	5.55	5 7	7.6
21		1.23	5.93	5 7	6.5	12 1	5.8	12.6	12 2	12.9	7 10	2.43	9.33	8 11	10.3	7 3	1.43	5.43	4 9	6.5	5 1	0.33	5.18	5 3	7.
22		1.43	6.33	5 8	6.6	11 10	5.8	12.5	12	12.8	7 7	2.23	8.93	8 9	10.1	8 4	1.68	5.83	5 4	7.	5 1	0.33	4.83	4 10	6.6
23		2.33	6.53	6 4	6.9	11 9	5.6	12.4	11 10	12.6	7 4	2.	8.63	8 7	9,9	8	1.73	6.23	5 8	7.1	5	0.3	4.43	4 6	6.3
24		3.33	7.93	7	7.3	11 9	5.4	12.2	11 10	12.4	7 1	1.83	8.33	8 4	9.7	6 1	1.83	6.33	5 11	7.1	4 10	0.28	4.	4 2	5.9
25		3.93	8.93	7 8	7.6	11 6	5.2	12.	11 7	12.2	6 9	1.53	8.23	8 1	9.5	6 8	1.93	6.43	6 1	7.5	4 10	0.23	3.73	3 8	5.43
26		4.13	9.63	8 4	8.2	10 7	4.9	11.8	11 5	12.	6 8	1.43	7.93	7 10	9.3	7 4	2.03	6.88	6 7	8.1	4 10	0.23	3.58	3 5	5.
27		4.43	10.23	9 1	8.6	10 1	4.6	11.5	11 3	11.9	6 5	1.28	7.68	7 6	9.1	8	2.13	7.43	7	8.5	4 10	0.23	3.43	3	4.6
28		4.43	10.63	9 7	9.	10	4.4	11.33	11	11,8	6 1	1.13	7 43	7 4	8.8	8 1	2.13	7.68	7 4	8.7	4 10	0.23	3.23	2 11	4.05
29		4.73	11.13	10 2	9.3	10 1	4.28	11.2	10 9	11.6	6 1	1.	7.3	7 3	8.6	7 11	2.18	7.93	7 6	9.	4 10	0.28	3.	2 10	3.8
30		4.98	11.53	10 6	8.5	10 2	4.13	10.98	10 7	11.5	6 1	0.93	6.93	6 8	8 5	7 8	1.98	8.03	7 6	8.9	4 10	0.33	2.83	2 8	3.6
31		5.23	12.13	11	9.8	.....	.....	.....	.....	.....	6 1	0.83	6.73	6 5	8.	.....	.....	.....	.....	.....	4 10	0.33	2.68	2 7	3.4

Water Gauges at LaSalle, Henry, Peoria and Copperas Creek.

Day.	August, 1877.					September, 1877.					October, 1877.						November, 1877.					
	LaSalle...	Henry.		Peoria.....	Copperas Creek.	LaSalle...	Henry.		Peoria.....	Copperas Creek...	LaSalle...	Henry.		Peoria.....	Copperas Creek		LaSalle...	Henry.		Peoria.....	Copperas Creek	
		Ab'v lock.	B'low lock.				Ab'v lock.	B'low lock.				Above lock.	Below lock.		Above lock.	Below lock.		Above lock.	Below lock.		Above lock.	Below lock,
	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Feet.	Ft In	Feet.	Feet.
1	4 10	0.33	2.68	2 7	3.4	4 7	0.0	1.33	1 1	1.43	4 6	0.33	0.88	0 10		0.9	6 5	1.33	5.33	5 1	7.45 §	9 65
2	4 10	0.33	2.63	2 6	3.5	4 7	0.0	1.28	1 1	1.4	4 10	0.43	0.83	0 9		0.87	6 5	1.33	5.33	5 1	7.4	9.7
3	4 10	0.28	2.48	2 4	3.6	4 7	0.0	1 23	1 1	1.39	5 0	0.43	0.83	0 8		0.84	6 4	1.28	5.43	5 1	7.4	9.75
4	4 10	0.18	2.33	2 3	3.3	4 7	0.0	1.23	1 0	1.32	5 0	0.43	0.83	0 8		0.82	6 6	1.33	5.33	5 1	7.4	9.75
5	4 10	0.13	2.18	2 1	3.	4 7	0.05-	1.18	1 0	1.28	5 0	0.38	0.98	0 9		0.85	6 6	1.53	5.03	5 1	7.5	9.85
6	4 9	0.13	2.13	1 11	2.8	4 7	0.05-	1.18	1 0	1.25	5 0	0.38	0.93	0 9	1.77	0.82	6 7	1.58	5.23	5 2	7.5	9.75
7	4 9	0.13	2,13	1 10	2.6	4 7	0.1 -	1.13	1 0	1.22	5 0	0.38	0.93	0 9	1.85	0.9	6 9	1.58	5.38	5 4	7.45	9.8
8	4 8	0.13	2.	1 10	2.5	4 7	0.1 -	1.08	0 11	1.18	5 0	0.43	1.13	0 11	1.97	1.05	7 1	1.63	5.63	5 5	7.5	10.
9	4 8	0.13	1,83	1 9	2.5	4 7	0.1 -	0.93	0 11	1.1	5 2	0.48	1.13	1 0	2.25	1.2	7 4	1.78	5.73	5 6	7.5	10.
10	4 8	0.13	1.88	1 8	2.3	4 7	0.1 -	0.93	0 10	1.08	5 2	0.48	1.23	1 0	2.3	1.25	7 11	1.98	6.13	5 9	7.7	10.2
11	4 8	0.13	1.88	1 8	2.3	4 7	0.1 -	0.83	0 10	1.08	5 2	0.45	1.33	1 1	2.5	1.3	8 9	2.38	6.73	6 0	7.85	10.65
12	4 8	0.13	1.83	1 8	2.15	4 7	0.12-	0.83	0 10	1.08	5 1	0.48	1.53	1 1	2.5	1.3	9 0	2.53	7.03	6 4	7.9	10.75
13	4 8	0.13	1.83	1 7	2.1	4 6	0.12-	0.83	0 10	1.	5 3	0.53	1.53	1 2	2.6	1.3	8 9	2.73	7.43	6 8	8.	10.95
14	4 8	0.13	1.83	1 7	2.1	4 6	0.1 --	0.83	0 10	1.	5 2	0.53	1.53	1 1	2.65	1.3	8 8	2.73	7.63	7 0	8.2	11.4
15	4 8	0.13	1.83	1 7	2.1	4 5	0.07-	0.88	0 9	0.9	5 1	0.58	1.58	1 4	2.72	1.35	8 7	2.78	7.93	7 4	8.45	11.75
16	4 8	0.08	1.83	1 7	2.1	4 6	0.07-	0.88	0 9	0.93	5 1	0 58	1.58	1 5	2.9	1.5	8 6	2.73	8.03	7 6	8.5	12.05
17	4 8	0.08	1.83	1 7	2.	4 6	0.07-	0.93	0 10	0.97	5 3	0.58	1.73	1 5	3.	1.5	8 6	2.68	8.08	7 7	8.55	12.1
18	4 8	0.08	1.73	1 6	1.9	4 6	0.07-	0.93	0 9	1.	5 3	0.63	1,73	1 7	3.2	1.8	8 6	2.68	8.13	7 8	8.4	12.4
19	4 8	0.08	1.73	1 5	1.8	4 6	0.07-	0.93	0 9	1.	5 4	0.73	1.78	1 8	3.2	2.15	8 5	2.68	8.13	7 8	8.5	12.4
20	4 8	0.08	1.73	1 4	1,8	4 6	0.12-	0.98	0 8	0.95	5 9	0.98	2.03	2 1	3.85	2.55	8 4	2.68	8.18	7 8	8.6	12 4
21	4 8	0.08	1.63	1 4	1.75	4 5	0.12-	0.98	0 8	0.9	6 3	1.1	2.53	2 6	†5.25	2.65	8 3	2.68	8.18	7 10	8.7	12.65
22	4 8	0.13	1.53	1 5	1.65	4 5	0.11-	0.93	0 8	0.9	6 5	1.23	3.23	2 9	‡5 9	2.8	8 5	2.68	8.33	7 11	8.85	12.95
23	4 7	0,13	1.48	1 6	1.6	4 5	0.17-	0.98	0 7	0.85	6 6	1.33	3.83	3 4	6.4	2.8	9 0	2.83	8.38	8 0	8.85	12.95
24	4 7	0.08	1.48	1 4	1.55	4 6	0.17-	0.98	0 8	0.8	6 8	1.38	4.53	3 8	6.6	2.8	9 5	3.03	8.63	8 1	8.9	13.
25	4 7	0;08	1.48	1 4	1.5	4 6	0.17-	1.03	0 8	0.7	6 8	1.48	4.63	4 2	6.8	2.9	9 5	3.13	8.78	8 3	9.	13.35
26	4 7	0.08	1.53	1 3	1.48	4 6	0.17-	1.08	0 9	0.8	6 8	1.58	4.93	4 8	7.2	3.75	9 7	3:33	9.03	8 6	9.2	13.4
27	4 7	0.05	1.53	1 2	1.45	4 6	0.07-	1.13	1 1	0.96	6 7	1.48	5.23	4 10	7.45	4.1	9 9	3.38	9:33	8 7	9.3	13.55
28	4 7	0.03	1.48	1 2	1.5	4 6	0.02-	1.13	1 1	1.	6 7	1.43	5.33	5 0	7.4	4.6	9 10	3.53	9.53	8 8	9.3	13.65
29	4 7	0.03	1.43	1 3	1.55	4 6	0.0	1.13	0 10	1.05	6 7	1.43	5.38	5 1	7.5	4.65	10 1	3.63	9.63	8 9	9.4	13.75
30	4 7	0.0	1.43	1 2	1.58	4 6	0.15*	1.	0 10	1.	6 6	1.43	5.43	5 1	7.4	4.7	10 4	3.73	9.73	9 0	9.45	13.9
31	4 7	0.0	1.38	1 2	1.55	.....	.....	.....	.....	.....	6 6	1.43	5.43	5 1	7.3	4.6	.....	.....	.....	.....	.....	.....

*Flash boards put on. Dam raised 5 inches. †Dam closed at 5 P. M. ‡Water run over dam at 10 P. M. §Water gauges are taken in refer ence to miter sills. Upper is low water mark; the lower is 5 feet below. Gauges are cut into the lock walls in feet and tenths.

NOTE—Water gauges in October have reference to low water of 1873, above and below lock. Top of dam is 6 .25 above low water mark.